DISARMAMENT

A periodic review by the United Nations

Volume XIV, Number 4, 1991

Hi-Tech Weapons and Proliferation Concerns
Serguei B. Batsanov
Janne E. Nolan
Andrew J. Pierre
John Simpson

Challenges of Defining Security
Michael D. Intriligator
Sayidiman Suryohadiprojo

Confidence- and Security-building Measures: Their Applicability Outside of European Contexts
Mohamed Jawhar
Abdu Kinana
Hugo Palma

Destruction of Weapons Systems under Multilateral Arms Control Agreements
Stephen J. Ledogar

Aspects of The Central American Peace Process
Homero L. Hernández Sánchez
Boris Yopo and Victor Millán

United Nations

DISARMAMENT

A periodic review by the United Nations

Volume XIV
Number 4
1991

United Nations
New York

READEX FICHE

Disarmament is issued quarterly by the Department for Disarmament Affairs, at United Nations Headquarters in New York. It is intended to serve as a source of information and a forum for ideas concerning issues related to arms limitation and disarmament and security. It is addressed primarily to those in government, academic and research institutions and the media who deal with these matters.

The periodical is issued in English, French, Russian and Spanish; the Arabic and Chinese language versions are temporarily suspended for technical reasons. The English version is available on subscription for $35.00 per year. Single copies of the French and Spanish versions are available at $15.00 each. Orders may be placed with the Sales Section, Room DC2-853, United Nations, New York, NY 10017.

Articles appearing in *Disarmament* may be reprinted without permission provided the credit line reads "Reprinted from *Disarmament*, a periodic review by the United Nations" and a tearsheet is sent to the Department for Disarmament Affairs, United Nations, New York, NY 10017.

The views expressed in articles contributed to this publication are those of the authors and do not necessarily reflect the views of the Secretariat.

ISSN 0251-9518

Contents

Hi-Tech Weapons and Proliferation Concerns

Proliferation of Weapons Systems and Disarmament Issues with Particular Reference to Prohibition of Biological, Chemical and Other Weapons of Mass Destruction
Serguei B. Batsanov 1

The Conventional Arms Market after Iraq: Prospects for Control
Janne E. Nolan 10

Regional Arms Restraint after the War in the Persian Gulf
Andrew J. Pierre 27

Trends in the Proliferation of Sophisticated Weapons and Missile Technology and Their Implications for International and Regional Security
John Simpson 40

Challenges of Defining Security

Defining "Global Security"
Michael D. Intriligator 59

Security Systems for the Prevention of War
Sayidiman Suryohadiprojo 73

Confidence- and Security-building Measures: Their Applicability outside of European Contexts

Implications of the Regional Environment for Regimes of Confidence- and Security-building for Asia and the Pacific
Mohamed Jawhar 85

The Relevance of Confidence- and Security-building Measures for Africa
Abdu Kinana 96

The Nature of Confidence-building in the Latin American Environment
Hugo Palma 104

Destruction of Weapons Systems under Multilateral Arms Control Agreements

Stephen J. Ledogar 115

Aspects of the Central American Peace Process

Development as an Instrument in the Central American Peace Process
Homero L. Hernández Sánchez 133

Regional Peacemaking and Disarmament in Central America
Boris Yopo and Victor Millán 144

Documentation Relating to Disarmament

Resolution 271 (XII), adopted by the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean at its twelfth regular session, entitled "Foz de Iguazú Declaration on the joint nuclear policy of Argentina and Brazil" Mexico City, 9 May 1991 161

Agreement between the Government of Hungary and the Government of Romania on the Establishment of an Open Skies Regime Bucharest, 11 May 1991 163

Excerpt on Nuclear Disarmament and Non-Proliferation from the French Arms Control and Disarmament Plan, 3 June 1991 186

Final Document of the Seminar for High-Level Military and Civilian Officials Yaoundé, 21 June 1991 187

Statement by President F. W. de Klerk on South African Accession to the NPT Pretoria, 27 June 1991 190

European Council Declaration on Non-Proliferation and Arms Exports, 29 June 1991 192

Communiqué of the Political Consultative Committee of the Warsaw Treaty Member States and Protocol Signed Prague, 1 July 1991 194

Communiqué from Paris Meeting of Five on Arms Transfers and Non-Proliferation Paris, 8-9 July 1991 198

Economic Summit Declaration on Conventional Arms Transfers and NBC Non-Proliferation London, 15-17 July 1991 201

Democratic People's Republic of Korea and the International Atomic Energy Agency Secretariat Complete Safeguards Agreement Text, 16 July 1991 206

Recent Books and Articles 207

Further Publications 219

Other Recent United Nations Publications on Disarmament 223

Contents of Recent Issues of *Disarmament* 226

Hi-Tech Weapons and Proliferation Concerns

Proliferation of Weapons Systems and Disarmament Issues with Particular Reference to Prohibition of Biological, Chemical and Other Weapons of Mass Destruction

Serguei B. Batsanov

Today, when transition to a new international order has appeared on the agenda of international policy, an order based not on mutual military threat, but on its guaranteed absence, when the cold war between East and West is gradually becoming a thing of the past, practically all of us have the impression that the threat of use of weapons of mass destruction is also disappearing. Indeed, until recently, this impression was not misleading, because most of the stocks of such weapons were and still are in the hands of major cold-war protagonists.

However, the Gulf crisis has reminded us of the dangers with which weapons of mass destruction and their means of delivery are fraught, and has demonstrated the

This article is based on a paper presented at the United Nations Conference on Disarmament Issues held at Kyoto, Japan, 27-30 May 1991. A compilation of all the papers of the Conference will appear in a forthcoming United Nations sales publication in the *Topical Papers* series.

Serguei B. Batsanov is Permanent Representative of the Union of Soviet Socialist Republics to the Conference on Disarmament in Geneva.

seriousness of the problem of their proliferation. On the one hand, this crisis has brought to light a number of weak spots in the system of international security established over the last several decades. On the other, it has shown the ability of the international community to react adequately, on the whole, to emerging threats. Unfortunately, events went so far that the response had to take the form of force with respect both to the liberation of Kuwait and the elimination of certain types of weapons in Iraq itself—the latter process amounting, in fact, to forced disarmament. Although under specific circumstances such an approach is justified, it must, naturally, be considered only as an exceptional, extraordinary approach and in no way the usual means of ensuring security and arms limitation.

A major lesson to be learned from the recent events is the need to attach priority attention to the problem of proliferation of various types of weapons, primarily weapons of mass destruction and their means of delivery. Here, there recently emerged a certain discrepancy between the concerns of the international community, on the one hand, and some slowness or indecisiveness and, perhaps, a certain complacency at the level of global, intergovernmental organizations, on the other. In future this problem ought to receive serious attention on the part of such organizations as, for example, the United Nations.

The problem of proliferation of weapons of mass destruction is, no doubt, complicated and multidimensional, and varies according to regional peculiarities and the specific types of weapons involved. It is thus natural that the mechanisms to solve proliferation are different.

As far as nuclear weapons are concerned, there is in place a rather solid, time-proven regime of non-proliferation. However, it is not universal. Indeed, it needs further strengthening. Although not many countries have remained outside the framework of the non-proliferation

Treaty, many of those that do so have well-developed nuclear programmes and increasingly act as "new" or potential nuclear suppliers. This issue has recently acquired a new dimension. In the past, the very participation of a non-nuclear State in the non-proliferation Treaty was viewed everywhere as substantial proof of the exclusively peaceful nature of its nuclear programme. At present, however, it is evident that this is not necessarily true—a situation that is reflected in Security Council resolution 687 (1991).

Another important aspect of the nuclear non-proliferation Treaty is the fact that—virtually from the moment it was concluded—it has been criticized as "discriminatory", dividing the international community into two uneven and unequal parts: those with the right to have nuclear weapons and those without such a right. However, the facts prove that, on the whole, the regime lives up to its goal. Still, additional efforts are needed to ensure that it remains in place after 1995, when the question of its extension will be addressed.

There is no special regime or special non-proliferation mechanism in respect of biological weapons, another type of weapon of mass destruction. There does exist a general prohibition regime based on the 1972 Convention, which, of course, has an important "non-proliferation" function as well. However, in spite of the fact that the Convention places all parties on an equal footing, without dividing them into "haves" and "have nots", universal adherence has yet to be achieved. This fact is worth mentioning in the light of assertions that the nuclear non-proliferation Treaty is discriminatory. Moreover, the Convention has practically no effective verification mechanism. Some openness and confidence-building measures, adopted at the 1986 Review Conference, do have a positive potential. However, only a limited number

of parties to the Convention participate in their implementation, and the measures themselves need further development. It does not seem to be a coincidence that there have recently been proposals to set up a special non-proliferation mechanism with respect to biological weapons.

The problem of chemical weapons proliferation has recently acquired special and, no doubt, justifiable importance. Here, as in no other field, one may observe parallel efforts being taken in a number of areas. Many States have adopted and enacted, although not always with equal effect, laws and regulations on export control. Exporters' groups, of which the "Australian Group" is the best example, have been set up with the primary purpose of ensuring that the supply of chemicals and—most recently—technologies from member countries of such groups do not lead to the proliferation of chemical weapons.

The joint Soviet-American statement on non-proliferation, adopted at the Washington summit on 1 June 1990,[1] may be cited as an example of attempts to harmonize approaches to the chemical weapons non-proliferation problem. This statement contains general approaches and defines joint and parallel activities by the USSR and the United States in this field. It also contains the Soviet-United States appeal to all countries to join in taking effective measures to stop the proliferation of chemical weapons.

Measures have been taken under the aegis of the United Nations to strengthen the 1925 Geneva Protocol, *inter alia*, by establishing under the Secretary-General a special mechanism to investigate breaches of the Protocol.

However, experience has shown that such measures can bring about only limited results. Thus, at present there is a general understanding that a really solid and long-term guarantee of the non-proliferation of chemical weapons can be provided only by conclusion of a universal conven-

tion on their complete prohibition and elimination. Such a draft convention is being elaborated at present in negotiations in the Conference on Disarmament in Geneva, and recent events provide the basis for hope that these negotiations may be successfully completed in the near future.

The "newest" of the non-proliferation problems concerns missiles and missile technology. A number of States, including the Soviet Union, implement measures at the national level to control the export of missiles and missile technologies. As yet there exists only one rather limited international mechanism of missile technology control, the Missile Technology Control Regime, in which a number of leading countries of the West participate. Naturally, the question has been raised of broadening the regime's geographical sphere of coverage by, *inter alia*, involving the Soviet Union, a leading space Power. In spite of a number of substantial flaws in the regime, the Soviet Union has supported its basic goals and expressed willingness to consider all aspects of its official accession to it. However, additional obstacles have emerged. First, the Soviet Union has not enjoyed the same status with respect to information exchange as have the other participants. Secondly, progress in this direction has been slow owing to the restrictions imposed by the rules of the Co-ordinating Committee for Multilateral Exports with respect, *inter alia*, to the use of Soviet rockets to launch other countries' satellites.

One of the major problems in the area of missile non-proliferation is the fact that more and more States are showing a justifiable interest in peaceful space research, and some of them want to establish their own industrial capability to launch satellites into Earth orbit. However, it is extremely difficult to make a distinction between military and peaceful space technology. In the mid-1950s international cooperation was established in the field of the peaceful use of nuclear energy, and an organization was cre-

ated—the International Atomic Energy Agency—for dealing with, among other things, the provision of materials, services or equipment under safeguards. However, in the area of missiles such a mechanism does not yet exist. It seems that this problem may become a priority issue in United Nations activities in the field of disarmament.

In spite of all the diversity of problems and conditions involved in the question of non-proliferation—in particular of weapons of mass destruction—I still believe it is possible to distinguish certain common aspects.

First, geographical proliferation of weapons of mass destruction and of their means of delivery always has a very negative bearing on conditions of security in the regions where such weapons emerge, and on global security in general. Eventually, it means, to some extent, a "subtraction" from the security of the very State that acquires this or that type of weapon.

Secondly, there are a number of dangerous "hot" spots on the political non-proliferation map, which, in their outline and location, often coincide with areas of unsettled crises and conflicts. These circumstances should be most seriously taken into account in the context of any further efforts in the field of non-proliferation.

Thirdly, the problem of non-proliferation is always a problem of the relationship between peaceful and military applications of relevant technologies. If, in establishing a regime to prevent the proliferation of this or that type of weapon, we also limit the peaceful economic and technological development of States, we will create a regime that can hardly endure. Thus an element of cooperation in the peaceful use of technology and scientific achievements must be included in any regime of non-proliferation and prohibition.

In this context it would seem appropriate to reflect on the possible creation of a special fund to promote the

development of advanced technologies in developing countries; such a fund could finance appropriate peaceful programmes in countries renouncing the acquisition of weapons, especially weapons of mass destruction and the means for their delivery.

This brings us to the fourth aspect: the problem of non-proliferation can be successfully resolved only through a broad, intensive dialogue between suppliers and receivers, between countries possessing advanced technologies and developing countries. What is required to deal with this problem, as with most other problems in the area of arms limitation, is openness. This is important for both suppliers and receivers of technologies. Ensuring such openness is not easy: it has not yet transcended the narrow framework of groups of States. Setting up a United Nations registry of arms transfers would seem a practical step in that direction.

In the light of the conflict in the Persian Gulf and the need to prevent similar situations from occurring in the future, it may be worthwhile to consider establishing under the United Nations a mechanism to foresee crisis situations and identify hot spots where there is proliferation of the most dangerous types of weapons. Such a mechanism could be set up under already existing structures, such as the Security Council, the Department for Disarmament Affairs, the Office for Research and the Collection of Information, or directly under the Secretary-General.

Staff might include highly qualified experts who, on the basis of information acquired by the United Nations from various sources, for example, the weapons trade register, the Organization's standardized reporting system on military budgets, and the control mechanism to strengthen the 1925 Geneva Protocol, could provide accurate prognoses as to the possible emergence of conflict situations in certain regions and develop appropriate

recommendations in this regard. At the same time, this mechanism would "feel the pulse" as to the proliferation of weapons, especially those of mass destruction and their means of delivery and would prepare, if need be, recommendations. Such recommendations might include, *inter alia*, a warning by the Secretary-General or the Security Council to parties to conflict situations or to "proliferators", in which they would be informed of possible international sanctions that might be taken against them.

Last but not least, one cannot ignore the fact that the very question of the non-proliferation of weapons raises the problem of dividing States into two categories: those possessing and those not possessing such weapons. The problem has been very prominent with respect to the non-proliferation of nuclear weapons. Nevertheless, experience has shown that the majority of States have adhered to the Treaty on the Non-Proliferation of Nuclear Weapons precisely because they consider it to be a real means for strengthening their own security, both at the regional and the global level. Yet what is also required to ensure a safe future for the Treaty is real progress in nuclear disarmament. Primarily, this means that progress must be made in resolving the issue of the complete prohibition of nuclear tests, as well as the problem of the production of fissionable materials for weapons purposes.

The road to a nuclear-free world can be neither easy nor short. Nuclear weapons are rooted too deeply in today's system of international security for them to be painlessly withdrawn all at once. First of all, the system itself should undergo drastic changes and the nutrient medium for the concept of nuclear deterrence should disappear.

The fact that the renunciation of the concept of deterrence through weapons of mass destruction is pos-

sible in principle is being attested to by the passing away of the concept of chemical deterrence—a process which, I believe, is taking place now, thus opening the way for the earliest complete prohibition of chemical weapons.

The conflict in the Gulf has shown the specious character of the assertion, on the one hand, that chemical weapons can play the role of a counterbalance to nuclear weapons and, on the other, that only possession of chemical weapons, making a retaliatory strike possible, can prevent an enemy from employing these weapons. In short, for the first time in many years a situation has now emerged in which it is quite possible to resolve two problems at once—the problem of the non-proliferation of chemical weapons and the problem of their complete prohibition.

Note

1 CD/1001.

The Conventional Arms Market After Iraq: Prospects for Control

Janne E. Nolan

The recent war with Iraq has sparked renewed interest in controls on the international arms trade. Years of unregulated arms sales to Iraq, many argue, contributed to Iraq's ambitions for hegemony and the inexorability of war. Unless curtailed, arms suppliers will now find new clients who may prove even more dangerous than Saddam Hussein.

Are the dangers of arms proliferation now so clear that countries will finally cooperate to establish an international system of restraint? The only possible answer is "It depends". The post-Iraq policy environment is rife with perils and promises: for each indication of support for tighter regulations on arms sales, there are equal signs that such an objective will prove ever more elusive in coming years.

In May 1991, the Bush Administration announced a new arms control initiative for the Middle East, calling for a regional ban on ballistic missiles and on nuclear and chemical weapons, and for a meeting of the five permanent members of the United Nations Security Council to

Janne E. Nolan is a Senior Fellow at The Brookings Institution and the author of *Trappings of Power: Ballistic Missiles in the Third World* (Brookings, 1991). An earlier version of this article appeared in the Summer 1991 issue of the *Washington Quarterly*.

develop guidelines to restrain the global sale of conventional armaments. Less than a week later, French President François Mitterrand proposed a similar initiative, while the Government of Canada pressed for a summit among the large Powers to develop a new regime of arms transfer restraint. These initiatives were heralded as evidence of a new departure in international arms sales policies.

But appearances may prove deceiving. There is still little consensus within the United States or the international community about the relative desirability of significant controls on conventional weapons. Conventional arms transfer restraint has never proven a fruitful endeavour for international diplomacy, certainly as compared to the regulation of nuclear or even chemical weapons. The nuclear non-proliferation regime was based on the exclusive nuclear capabilities maintained by the super-Powers for many years and is held together by a widespread consensus about the unique danger of nuclear weapons. In the case of chemical (and biological) weapons, eliciting multinational support for a restraint regime is possible in large measure because of the less than compelling military utility of these weapons and the moral opprobrium raised by the grave risks they pose to non-combatants.

The proliferation of conventional technologies shares few of these attributes: the exclusive ownership of all but the most advanced armaments is already shattered, the dangers of proliferation are disputed by many, and the perceptions of utility overwhelm any moral opprobrium. The only formal conventional arms restraint regime, the Missile Technology Control Regime (MTCR), restricts the sale of ballistic missiles and has proven workable largely because of the association of those missiles with nuclear or chemical delivery. Problematically, conventional weapons have always been seen as the benign alternative to nuclear proliferation and remain the most common instrument of

dissuasion in efforts to stop new States from going the nuclear route.

Before the MTCR was initiated in 1987, there was no formal international apparatus to guide transfers of conventional technologies to developing countries. There is still very little interest in a regime that would significantly curtail exports of all but the most advanced weapons or dual-use technologies. Governments, including those that adhere to the MTCR and the nuclear non-proliferation Treaty, have vigorously resisted controls on transfers of combat aircraft and non-ballistic missiles, for example, despite their pertinence to the delivery of nuclear weapons and potentially to ballistic missile development.

Will the Iraqi war change this calculus and heighten international interest in regional and global arms control initiatives? While a selective system of restraints on the supply of certain key technologies may be feasible, a comprehensive arms control regime will likely prove far more difficult to achieve. Major supply and demand factors will have to be considered, and the relative feasibility and effectiveness of alternative approaches must be assessed realistically.

On the positive side, there are several reasons to be optimistic about the prospects for more ambitious supplier efforts at arms restraint in the wake of the Iraqi crisis. Largely unregulated by formal agreement, sales of weapons to the third world amount to a $30 billion annual arms bazaar, with over three dozen suppliers offering advanced weapons. During the recent conflict, coalition forces faced threats posed by weapons of their own design, from modified Soviet Scud B missiles to French Mirage jets to the latent but mercifully unrealized threat of chemical weapons made with West German assistance. Western technology also gave Iraq an independent weapons industry which many believed could have eluded an interna-

tional embargo. How and why the industrial world indulged Iraq's military ambitions is now a subject of great controversy and recrimination. Whether this sudden attack of self-examination will be sufficient to prompt durable policy changes, however, remains to be seen.

Another factor in favour of new restraint initiatives is the unprecedented level of cooperation forged among the industrial countries since Iraq's invasion of Kuwait. The *rapprochement* between the super-Powers, in particular, is a promising new element in the geo-political equation. Assuming that the Soviet Government does not revert to old forms of rivalry with the West in the third world, the United States and the Soviet Union will have a common interest in containing regional instabilities—in part, by restraining arms sales. The joint statement signed in January 1991 by United States Secretary of State James Baker and Soviet Foreign Minister Alexander Bessmertnykh, for instance, pledged that the two sides would seek a common approach to the quest for peace in the Middle East. The Soviet Union already has indicated it will join the MTCR and is developing ways to regulate the export activities of its own defence industries.

The success thus far of the MTCR in impeding technology proliferation for missile programmes also augurs well for future multilateral cooperation. The regime is credited with helping stop the Argentine-Egyptian-Iraqi Condor II/Badr 2000 programme in 1990, discouraging Chinese sales of the M-9 missile, and forcing the West German Government to crack down on private firms engaged in missile development efforts in both the Libyan Arab Jamahiriya and Iraq.

Another factor favouring a new climate of restraint is the reascendance of multinational institutions. After many years of cynical disregard from most of the leading nations, the United Nations increasingly is being seen as a

mechanism for international mediation and conflict resolution. Its role in implementing the disarmament of Iraq pursuant to Security Council resolution 687 (1991) has made it the centre-piece of the development of a post-war security regime in the Gulf. If this trend continues, the United Nations could provide much needed international leadership for encouraging global arms restraint and regional security initiatives.

Growing United States interest in tightening up national export policies is also cause for cautious optimism. In addition to White House backing for new policies, some kinds of arms export controls may find a new source of support within the United States military, especially if an expanded American military presence is maintained in the Persian Gulf region. Heavily armed countries which are politically unstable could pose a direct risk to the security of United States personnel and military technology deployed overseas.

Conventional arms restraint has certainly received heightened attention in the United States Congress and among private commentators, with considerable support for a comprehensive arms embargo on the Middle East, "from Marrakesh to Bangladesh", as one analyst put it.[1] Congressional actions have included several versions of such an initiative, including a bill introduced by Senator Joe Biden (D-Del.) calling for a 60-day moratorium on arms sales to the Middle East to allow suppliers time to develop a restraint regime.

Similarly, West European Governments have undertaken steps to tighten their oversight and control over arms exports. Germany, Belgium, and France have all discussed the creation of new domestic apparatus aimed at this objective, while the European Community agreed in May 1991 to publish an annual arms trade registry to allow public scrutiny of the military sales of participating members.

Renewed interest in international arms restraint, however, will have to compete with other factors which may impede attainment of such a goal. As has happened repeatedly in the past, the political interest in restraint may be outstripped by structural imperatives which favour permissive export policies. The most critical factor militating against more stringent supplier controls is the changing and increasingly diffuse character of the international technology market. Protectionist instruments, like the missile cartel, work only in proportion to the clout of the members and their relative monopoly on the controlled products. Over thirty countries produce weapons, and over a dozen of these can produce missiles. Several, such as China, the Democratic People's Republic of Korea, and Brazil, are unapologetic about their permissive missile export policies, and have indicated they will not become members of the MTCR or any other restraint regime until they have a more equal share of the arms market. In other areas of weaponry, including fighter aircraft and naval vessels, the number of potential exporters is much larger and the consensus in favour of controls even weaker.

Trends in the technology market presage declining control by Governments over the disposition of defence-related innovations. Critical technologies vital to defence, from supercomputers to biotechnologies to fibre optics, are increasingly commercial in origin. As developing countries establish their own weapons industries, they become capable of tapping into new sources of commercial and dual-use goods outside of great-Power constraints. In the future, an ever-shrinking percentage of technology will be subject to any direct governmental controls, testing the viability of cartels for all but a select number of the most advanced technologies.

The trends toward the economic integration of Europe, multinational defence cooperation, and liberal-

ized trade between East and West also will have serious implications for developing countries' access to military technology. Given most industrial countries' dependence on exports, the easing of trade barriers among them may raise the level and volume of defence technology available for purchase globally. In the absence of disincentives, former Eastern European bloc States may increasingly try to benefit from Western technology and lessened Soviet control of their military sectors by seeking military clients of their own. Czechoslovakia's negotiations with the Syrian Arab Republic in June 1991 to sell tanks is a case in point. The migration of expertise also is defying national boundaries. Since the beginning of the policy of *perestroika*, for example, dozens of Soviet nuclear engineers have apparently found their way to India and Pakistan.

With narrowing constraints on domestic investment in defence and increasing foreign penetration of the United States market, industrial countries' defence industries may also seek a larger share of the global arms market. Many in industry and Government believe that marketing weapons globally is the only way expensive national research and development programmes for futuristic technologies, such as stealth, can be made affordable. Without higher export revenues, rising weapon costs could require an unlikely increase in governmental subsidies to companies involved in advanced research and development. How the advanced States decide to support their own high-technology sectors could thus have consequences for technology diffusion. A deepening dependency on exports of dual-use technologies could force a State to liberalize arms and technology export policies in a manner that might not reflect its long-term foreign policy and military objectives. A policy that sought to subsidize the costs of national security and sustain nations' economic competitiveness by enhancing the capabilities of smaller States to

wage war with advanced weapons would seem a paradox, but it is not out of the question.

Another structural impediment to arms restraint is the central role which arms agreements have come to play in the relations between the developed and developing world. Arms sales, as the leading currency of international diplomacy for many countries—including the United States and the Soviet Union—are used to indicate friendship or alliances, to encourage positive changes in clients' policies, and to sustain goodwill. A refusal to provide armaments, by contrast, is taken as a sign of disapproval of a Government or its policies. Except for the most advanced technologies, the United States refuses arms requests only from countries with which it has overtly hostile relations. The political dependency on arms exports was recently illustrated in the Bush Administration's $24 billion arms package for Egypt, Saudi Arabia, the United Arab Emirates, Bahrain, and Turkey following the end of hostilities in the Persian Gulf. The apparent conflict between the quest for an arms control regime and these proposed weapons transfers, the Administration hastened to explain, was not real. For all of its seeming irony, selling arms to countries in order to encourage their participation in a peace process has been the mainstay of United States Middle East policy for decades.

Finally, there is a basic question of the priority which will be given to mechanisms that stem weapon proliferation relative to defensive responses, such as promoting anti-tactical ballistic missile programmes for key allies or even deploying strategic defences in the United States. These instruments are not necessarily mutually exclusive, but they represent wholly different approaches to the problem and may ultimately be incompatible. Access to anti-missile technologies can assist States in the development of offensive missiles. For example, the Republic of Korea is

believed to have converted the Nike Hercules surface-to-air missile (proven somewhat effective against ballistic missiles as well as against aircraft) to serve a surface-to-surface role.

However challenging the picture may seem, a free market is not the only realistic arbiter of technology transactions. Supplier cartels may seem outmoded and transitory in the light of the rapid transformations under way in the international system. Yet they do constitute one of the few mechanisms by which advanced countries can influence the pace of international developments, however imperfectly.

And there are several reasons regional Powers may have a growing interest in arms restraint. First, the demand for armaments will be tempered by resource constraints. The economic effect of the war against Iraq is taking its toll not only on the coalition partners, but on States throughout the third world which faced higher oil prices for many months. Secondly, there are the obvious military threats which countries face from missile and other advanced-weapon proliferation in the hands of proximate adversaries, dramatized by the Iraqi war. Even non-combatants are subject to attack when military adversaries are separated only by a common border, and when missiles or non-conventional munitions threaten to move the battlefield to other countries or into population centres.

The politics in the Arab world clearly have changed. The heightened sense of vulnerability and common purpose during the war has brought unprecedented cooperation among Arab countries and forged much stronger relations with the West. One of the more encouraging developments to emerge from the region in recent years is the proposal from Egyptian President Hosni Mubarak to ban weapons of mass destruction from the area. The Mubarak plan urges joint negotiations on all non-conven-

tional forces but does not insist that there be an overt, formal linkage between Israeli nuclear arms and other types of weapons. The proposal is rife with political and technical problems, but has not been dismissed by any State, including Israel.[2] What is most important is that States like Egypt are taking the lead in regional security initiatives.

For now, though, the dialogue among adversaries in the Middle East, the Indian subcontinent, the Koreas and elsewhere is far too embryonic to inspire much confidence about imminent change in arms acquisition policies. And there are other reasons to be sceptical about the prospects for regional arms restraint. One is the likely effect of the success of American technology in the war against Iraq on the demand for advanced weapons among third world clients. Countries may not be able to afford stealth technology for now, but they may certainly seek advanced cluster munitions, fuel air explosives, and sea-launched cruise missiles. Another factor which may mitigate the success of a restraint regime is the growing number of competitive arms suppliers. With China, Israel, and even North Korea already serving as fairly significant suppliers of technical assistance to other third world weapon producers, this trend appears to have become a matter of intra-third world diplomacy, potentially circumscribing the ability of the industrial Powers to impose meaningful trade controls.

In the end, the viability of any arms restraint regime will depend on whether it elicits political support from third world countries. Perhaps the greatest impediment to new security arrangements is the perception of discrimination which arises when developed countries seek restrictions on developing countries which they themselves do not honour.

Towards a Regime of Managed Military Trade

Through instruments such as the MTCR, States that retain some control over sensitive technologies can influence demand by raising the financial and political costs of acquiring them. Technology will eventually be diffused to countries determined to achieve certain military capabilities. Trade restrictions, however, can buy time to devise ways to contain the instabilities posed by global militarization and to address the causes of international conflicts. The added time could also be used to help States develop force postures and doctrines oriented towards deterrence and stability and to devise international norms for managing the risks posed by the diffusion of advanced technologies.

The first priority of a regime to control transfers of sensitive technologies must be to develop simple guidelines that can win wide support, with a short list of targeted technologies and flexible decision-making rules. Many experts have suggested that developed countries could increase their influence by focusing on a few "enabling" technologies, such as guidance technology, certain kinds of computer software, and biotechnologies. The diffusion of these kinds of goods is still so contained that denial of a sale would have a real impact.[3] With the exception of a few categories of items that could be restricted *a priori*, such as biological and chemical agents, decisions about what constitutes sensitive technologies will increasingly have to take into account the specific conditions in recipient States, including their industrial capabilities, local or regional enmities, the sophistication of their military forces, and the overall foreign policy objectives of both suppliers and clients. In turn, understanding these conditions will require more emphasis on shared intelligence, verification and, ultimately, cooperation from the receiving country.

To reform the export control system, building on

existing institutions established for coordinating exports would probably be more productive than attempting to establish a wholly new apparatus. For all its imperfections, the Coordinating Committee on Multilateral Export Controls (COCOM) for East-West trade could provide operational lessons about such challenges as identifying and tracking technologies and, although this was its weakest facet, enforcing restraints. With fewer restricted goods, efforts to monitor technology flows with shared intelligence, to impose strict penalties for non-compliance, and to pressure those who are not complying with guidelines could become more effective.

Given the growing complexities of reforming trade guidelines, advanced nations should consider elevating a regime controlling military trade to the status of an international agency, even if membership remains strictly consensual. Such an apparatus could provide the expertise to anticipate transfers of precision-strike systems, anti-satellite systems, and other futuristic technologies that could threaten global stability, and it could help manage their dissemination in a more structured way. This international agency could have several regional sub-groupings, reflecting changes in power alignments in the international system. Although the basic structure could remain, with power in the hands of advanced industrial countries, additional, regional, consultative mechanisms could deepen international understanding about the emerging technology environment.

One basic function an international agency could perform is the maintenance of a comprehensive database for monitoring the technology embodied in civilian and military products. The development of a comprehensive United States export control policy has long been hampered by the absence of such a data bank. In 1989, for instance, the General Accounting Office charged there was

no coordination among United States agencies that were supposed to track dual-use technologies available internationally. Without comprehensive information, national and international agencies cannot adjust controls to the realities of the market and cannot consider the effectiveness of alternative policies.

Far greater international and domestic cooperation between industry and Government may also be necessary to identify, let alone monitor, technologies deemed vital to security. As the European countries move to rationalize their high-technology industries by melding commercial and defence activities, for instance, companies will have to do more to ensure the security of their defence-related innovations. The Japanese case also highlights the need for such cooperation. As the world's leading source of sophisticated information technology, Japanese industry dominates what has become a crucial component for a wide range of advanced military missions, including command and control, intelligence, targeting and guidance. Without support from Japanese industry, any control regime could be readily subverted by Japanese exploitation of market opportunities.

A practical model for industry-Government cooperation might be found in efforts to control the spread of chemical weapons.[4] The Chemical Manufacturers Association, whose members account for almost 90 per cent of all chemical production in the United States, has actively helped devise the terms and mechanisms of a treaty to ban chemical weapons. Without industry's assistance, the Government could not have identified the thousands of items relevant to making chemical weapons or where they are produced, nor could it have evaluated the risks and benefits of alternative treaty limitations and their verification.

One problem which will remain is how to select the

technologies that warrant attention, especially as defence innovation becomes increasingly dependent on foreign and United States commercial components and as the pace of dissemination and obsolescence accelerates. The MTCR has managed to come to grips with the synergism among particular dual-use technologies, which, added together, could augment missile production capabilities. In principle, the lists of controlled items compiled for the MTCR could be the basis for a more comprehensive approach to North-South technology diffusion, were there political support for such an objective. There is sufficient flexibility in the existing guidelines to accommodate new kinds of high-risk technologies which may become more widely available in coming years, including equipment pertinent to warhead design, improvements in missile accuracy, and range and targeting capabilities.

Whether the United States and other industrial countries are prepared to offer client States incentives to limit their weapons acquisition programmes and, if so, what kind of incentives, is another unresolved question. Just in the United States, the absence of effective coordination among agencies with jurisdiction over trade policy, security assistance, economic assistance, sensitive technology transfers, space policy and arms control makes it difficult to consider mechanisms from which Washington could gain leverage.

Agencies with responsibilities for international debt management and other concessionary transactions need to be brought into the policy process to see if there may be ways to link financial incentives and military restraints. At a minimum, the policies of the World Bank, the International Development Agency, and other international lending agencies should be reviewed to ensure that assessments of a country's eligibility for credits and loans take into account the influence of its military, including the nature

and relative burden of weapons development and production programmes. Although the degree to which aid should be made conditional on military restraint is highly controversial, it is clear that Governments need to find means to connect development assistance activities with other foreign policy objectives.

The international effort since August 1990 to isolate Iraq, as well as growing international concerns about destabilizing developments in countries such as Libya, the Islamic Republic of Iran, and North Korea, could be the basis for a selective multinational arms restraint regime in the near term. These countries could be subject to very stringent trade controls and accompanying sanctions, to be observed by all the industrial countries and their major clients. In the longer term, however, export cartels are not a solution for removing the forces that impel countries to acquire advanced weapons. Efforts to restrain weapons acquisitions are more likely to be effective if they are part of broader initiatives to build a genuinely interdependent international system with codified and reliable means of resolving regional disputes peacefully.

In support of such efforts, nations might wish to explore confidence- and security-building measures (CSBMs), including information and intelligence exchanges, on-site inspections of defence production and space launch facilities, and prior notification of missile tests. These and other mechanisms which promote consultation among regional rivals could help to ease unwarranted suspicions about missile production efforts, limit their political and military consequences and, possibly, reduce some of the incentives now propelling the expansion of these programmes. Examples of existing regional CSBMs include the agreement between India and Pakistan not to attack one another's nuclear facilities and to begin negotiation of a nuclear-test ban; the process of mutual reas-

surance taking place between Argentina and Brazil, which includes on-site visits to nuclear facilities and declarations of non-hostile intent; and informal United States proposals to encourage Middle Eastern countries to abjure the first use of ballistic missiles and to give prior notification of missile launches. CSBMs, like a pledge not to use ballistic missiles preemptively or on-site visits, would not endure in a crisis or stop a dedicated missile programme, but they could help to reduce the climate of suspicion among adversaries.[5]

Most proposals for international arms restraint agreements tend to reflect a bias in favour of the great Powers, often with little sensitivity for the ambitions of developing States to become more equal partners in the international system. More far-reaching cooperation may be impeded by the smaller States' perception that the great Powers are discriminating against them. Defining common norms that can elicit genuine international support will require taking the objectives of developing countries seriously, and recognizing that those interests are as enduring as they are diverse. In the final analysis, it may be the struggle for political legitimacy that will define the success or failure of a restraint regime. In other words, as long as the large Powers remain reluctant to abide by the restraints they seek to impose on others—from nuclear arms control to controls on their own pace of military innovation—an enduring control regime may remain a chimera.

Notes

1 See Edward Luttwak, "Stop arming the third world", *New York Times*, 4 November 1990, p. 29.

2 The proposal calls for all States of the region to sign the non-proliferation Treaty, for instance, which Israel refuses to do. For further discussion, see the forthcoming United Nations publication, *Study on Effective and Verifiable Measures Which Would Facilitate the Establishment of a Nuclear-Weapon-Free Zone in the Middle East* (Sales No. E.91.IX.14).

3 As John D. Steinbruner has argued in an internal memorandum, "The prohibition of exports should be directed only to direct weapon products and to items so closely related to weapons applications that such an application predominates over all other applications. For militarily sensitive technologies that cannot meet this criterion strictly applied, export licensing should require explicit, accurate, and complete end-use disclosure. For especially sensitive technologies, co-operative verification agreements should be made a condition of export." For further discussion, see Steinbruner's article "The Consequences of the Gulf War" in *Brookings Review*, vol. 9, No. 2, Spring 1991.

4 The model of the chemical manufacturers may be particularly apt for the space industry. Commercial interests involved in promoting peaceful space cooperation have the most to lose from international opprobrium for the diversion of space technology for ballistic missiles or other offensive military uses. The immediate self-interest of such companies suggests that they help Governments restrain missile programmes in unstable countries by identifying technologies needed for missile development and devising safeguards that can discourage the adaptation of civilian equipment for military programmes. Although some might consider this undue encroachment on national sovereignty, this is one technology for which a few suppliers still have the leverage to influence the pace and content of production programmes.

5 Other CSBMs which could be considered for a restraint regime include the application of international safeguards and on-site verification at space launch facilities to ensure they are not being used to develop missiles; maintaining missile forces unarmed and unfuelled during peacetime, subject to monitoring; prior notification of test launches, as well as agreements to orient tested systems away from adversaries' territory; regional export controls, such as agreements not to sell missiles or other weapons to terrorist States; and routine bilateral military exchanges between rival States to document the extent and pace of weapons development and acquisition plans and to discuss common security concerns.

Regional Arms Restraint after the War in the Persian Gulf

Andrew J. Pierre

Never has the need for developing some significant restraints upon the transfer of sophisticated military technologies to the third world been more clearly perceived than in the aftermath of the Persian Gulf war of 1991. The conflict dramatized the folly of assisting and sometimes encouraging the build-up of a potent military force which is quite out of scale in relation to a nation's defensive needs against its neighbours.

During the 1980s, Iraq spent in the order of $53 billion to build one of the world's largest military establishments. Saddam Hussein acquired a vast arsenal, including 700 advanced jet fighters with some state-of-the-art Soviet MiG 29s and French Mirage F1s, approximately 5,000 modern battle tanks, a wide range of missiles capable of reaching with varying degrees of accuracy targets on land or sea and in the air, assorted other weapons, and chemical and biological capabilities. Almost all of these weapons or their components were acquired directly or indirectly from distant suppliers, principally the Soviet Union and France, but also Brazil and South Africa, and, in the case of some

This paper was prepared for a volume on international arms transfers to be published by the Forum on the Problems of Peace and War, in Florence, Italy.

Andrew J. Pierre is Senior Associate at the Carnegie Endowment for International Peace.

technologies, from the Federal Republic of Germany and the United States. In addition, Iraq engaged clandestinely upon an ambitious nuclear weapons programme.

The high-tech nature of the war, while permitting selective targeting which could be used to limit collateral damage, none the less highlighted the lethality of modern warfare with sophisticated arms such as cruise missiles. While Baghdad's use of Scud missiles was not very successful, it did demonstrate that in any future wars in which longer-range and more effective missile systems were employed, it might become very difficult to keep a conflict from spreading over a wide geographic area.

As a policy issue, the question of restraining arms sales to unstable regions has not had a very receptive audience in the past decade. Although a few prescient analysts pointed out the dangers and risks of the unregulated flow of weapons transfers, decision makers within Governments and the "realists" within the larger foreign policy community took the view that this was not a problem which could be seriously dealt with in practical terms. Most often one heard the argument that "if one country does not sell a weapon, another country will". Another favourite of the naysayers was to insist upon the absolute economic necessity of arms sales in maintaining defence industries and in supporting employment and national economies. Such arguments were usually stated in the most simplistic terms, as if restraining arms sales was an "all or nothing" proposition. Far too little attention was given to the possibility of *moderating* competition through the *regulation* of the quality and the quantity of arms sales. The beneficial role of arms sales in the creation and maintenance of regional balances was not well analysed or understood.

This will now change. At a minimum a significant effort will be made to build arms restraint into plans and concepts for the future stability of the Persian Gulf region

and into attempts to progress towards a settlement of the Arab-Israeli conflict. Both United States Secretary of State James Baker and Soviet President Mikhail Gorbachev have spoken prominently of the need to create an arms control regime in the Middle East. In his testimony before the House Foreign Affairs Committee in February 1991, Baker observed that five Middle East countries had more battle tanks than the United Kingdom or France. The major suppliers after the war, he noted, should ask not only how to prevent Iraq from ever again acquiring such a disproportionate arsenal, but how supply restraints could be developed on the flow of weapons and dual-use technologies into the region as a whole.[1] Prior to the conflict, President Gorbachev, in addressing the United Nations General Assembly in 1988, spoke of the desirability of some international constraints on arms transfers. The conflict has even led to considerable soul-searching in Paris regarding the wisdom of past French practices in pushing arms sales almost without restraint.

The number of nations that manufacture advanced weaponry has grown over the past decade, but remains sufficiently small to organize a system of restraint among the suppliers. The United States and the Soviet Union still dominate the third world arms market, accounting between them for over 60 per cent of all arms transfer agreements and arms deliveries to the third world between 1982 and 1989. In 1989, the Soviet Union accounted for 38 per cent of arms transfer agreements with the third world, the United States 26 per cent, Western Europe (France, United Kingdom, Federal Republic of Germany and Italy) 17 per cent, China 4 per cent, and all others 14 per cent.[2]

Turning to the regions of the third world to which arms have been transferred, we find that the Near East/South Asia received 70 per cent of deliveries in 1986-1989, with all the other regions being relatively small

recipients: East Asia/Pacific 13 per cent, sub-Saharan Africa 9 per cent, and Latin America 8 per cent. Within the Near East/South Asia region, the Soviet Union supplied 43 per cent of the arms in 1986-1989, with the United States 15 per cent, France 9 per cent, the United Kingdom 9 per cent, China 7 per cent, and all others the remaining 17 per cent.[3]

The above data indicates quite clearly two aspects of the problem. One is that the Middle East remains the key region if the international community is to seek to restrain arms transfers on a global scale. The other is that a relatively small number of suppliers still have an oligarchic hold on the arms trade. Interestingly, with the exception of Brazil, they were all members of the international coalition which came together in common purpose in resisting Iraq's aggression against Kuwait.

There are, in effect, three arms races under way in the Middle East. To some extent they overlap with each other. The first is between Iraq and the Islamic Republic of Iran, two neighbours which are historical enemies and which will never fully trust each other. The second is between Saudi Arabia, with its junior partners in the Gulf Co-operation Council, and both Iran and Iraq. The latter two seem to alternate in their attempts to dominate the Gulf. The third, between Israel and the Arab States, is especially complex. Israel takes the view that it must be strong enough to defeat any combination of Arab States, which therefore means being substantially more powerful than any one of them. But each Arab neighbour fears having to fight Israel on its own.

The result has been massive expenditures on arms by all of the principal nations of the region—Iraq, Saudi Arabia, the Syrian Arab Republic, Egypt, Iran and Israel—in that order.[4] The cost in terms of the drain on national economies is considerable. Iraq in recent years has spent

25 per cent of its gross domestic product on defence, Saudi Arabia about 20 per cent and Syria and Israel between 10 and 15 per cent.[5]

In addition, Israel, Iraq, Iran and Egypt have felt compelled to develop their own arms industries. In each case the primary incentive has been the desire to reduce dependence upon outside suppliers. Iraq has proven adept at extending the range of its Soviet-supplied missiles. Israel manufactures its own main battle tank, the Merkava. But given the high technology of imported weapons systems in the region, and the belief that these nations hold that their security requires a full spectrum of defence capabilities, it is highly unlikely that they will be able to get along by themselves.

Given the diversity of motivations for acquiring arms that is to be found in the Middle East, agreement on some form of restraints will be no easy task. Yet both an enduring political settlement of the Arab-Israeli conflict and stability in the Persian Gulf are unlikely to be achieved without some form of multilateral restraints on arms transfers, either tacitly agreed upon or negotiated. One reason is that an overall political settlement would not eliminate the long history of distrust. Both Israelis and Arabs would for many years remain highly armed, if only to ensure against a breakdown of the settlement. In such an atmosphere, a large infusion of arms by one side or the other would immediately threaten to undermine the political settlement. Thus without some arms control dimension, a political accord would be vulnerable and uncertain.

The relationship between negotiating a political settlement and multilateral arms restraints in the Middle East needs new analysis and thought. It has long been the conventional view that political agreement must precede restraints on arms. It is, of course, perfectly true that the roots of the Arab-Israeli dispute and of Persian Gulf rival-

ries are religious and political, rather than military. (Even so an imbalance in the military equation can have dire political consequences.) Nevertheless, a complete political accord need not be a prerequisite for some degree of arms control. Regulating arms transfers into the Middle East could facilitate the process of reaching a political settlement. It could be part of the negotiating process. And it could play a critical role in maintaining the integrity of the political settlement by preventing military deterioration, which could then undermine hard-won political gains.

In the past the supply of arms has often been interwoven with political negotiations.[6] The Camp David accords and the two earlier Sinai disengagement agreements were made "acceptable" through assurance of arms. Conversely, arms have been withheld at certain times by both the United States and the Soviet Union in order either to create pressures for flexibility in negotiations or to prevent either side from acquiring a "war option" that would guarantee its victory at acceptable costs, thereby risking an inducement to conflict. In the post-Gulf-war environment, more attention should be given to the possible role of arms control measures as part of the future negotiating process.

Hypothetically, an arms control framework for regulating the transfer of arms could take three forms: agreement could be reached exclusively among the suppliers; the recipient States within the region could take the initiative and come to an agreement among themselves to limit weapons imports; or there could be an understanding between the suppliers and the recipients.

Realistically, only the third option is likely to be politically feasible. As we have seen, the United States, the Soviet Union, France, the United Kingdom, and China still transfer the large bulk of the actual weapons systems sent to the Middle East. Since many of their weapons are of a degree of sophistication matched by no other suppliers',

these countries could theoretically control among themselves a substantial portion of the flow of arms as called for in the first option. But these States are quite vulnerable to pressures from the recipients, either because of their desire to retain political influence with the receiving State or because of their dependence upon oil. In as politically volatile and dangerous a situation as the Arab-Israeli confrontation, one with considerable domestic political overtones for the democratic States, no outside State or group of States that has established an arms supply relationship in that region will want to be charged with changing the ground rules unilaterally in a form of diktat.

The second option, an agreement on restricting arms purchases made solely by the parties within the region, would involve even more insurmountable problems. It will be some time before the political climate among the States in the Arab-Israeli confrontation and in the Persian Gulf will allow this possibility. The necessary degree of common purpose—and confidence—does not exist for such an arms control initiative to be developed and implemented solely by the States within the region.

This leaves the most promising possibility—one that is still enormously difficult to achieve—of an agreement that involves both the suppliers and the recipients. Such an accord would have to be built upon the common assumption that no party is likely to make gains worth the costs in a future conflict. It would have to be seen as stabilizing a military balance, and it would have to be part of a more comprehensive approach towards an overall political settlement.

An arms control regime could provide for various types of quantitative and qualitative restraints on transfers into the Middle East. Because of the existing trend towards sending ever more sophisticated military technologies into the area, limits of a qualitative nature would seem to be

especially important. A rough quantitative balance already exists, an objective to which the outside suppliers have paid some attention in the past, and one that would merely have to be carefully maintained. An additional reason for giving priority to restraints of a qualitative nature arises from the geographical proximity of the cities of the opposing parties. The introduction of highly accurate ballistic missiles and long-range precision-guided munitions threatens population centres and would have a very destabilizing impact upon the region. A good deal could still be done to limit such weapons systems in the Middle East, in spite of the missiles already introduced into the region in recent years.

The initiative for an accord that includes both the suppliers and the recipients would have to come from the former. Ultimately it is the arms producers who have the power to withhold the weapons. To reach a common understanding on desirable restraints, it would first be necessary for the suppliers to discuss their perceptions of the requirements for stability—or at a minimum, the avoidance of war—in the region. This would in all likelihood necessitate a relatively complete exchange of views on foreign policy goals, the defence needs of the individual States and ways of maintaining the military balance.

Accordingly, what would be desirable is the creation of a continuing forum for discussion and for making informal, perhaps even tacit, agreements, rather than anything resembling the formal negotiation of an accord or treaty. What would be sought is the *coordination* of policies so as to *regulate* the flow of arms into the Middle East in such a way as to avoid creating instability. It would be essential, however, to include the recipients at a second, but nevertheless early, stage. If the agreed restraints were perceived by them to be adversely affecting their fundamental security interests, it is doubtful that the limitations could

be made lasting. The security perspectives of the recipient States must therefore be adequately taken into account. But it should not be assumed that they will oppose all restraints, for, having fought four Arab-Israeli wars and with the Persian Gulf conflict of 1991 behind them, these countries have a desire for peace and a common interest in achieving it.

A very limited step in this direction was undertaken in 1950, following the signing of the Tripartite Declaration by the United States, France, and the United Kingdom. Concerned that an arms race was developing in the area after the war of 1947-1949, these three countries undertook to regulate the flow of arms to the Middle East, which, at the time, they monopolized. This was done through the establishment of the Near East Arms Coordinating Committee, which was quite effective in controlling the transfer of arms until 1955, when the Soviet Union negotiated the Czechoslovak arms deal with Egypt. Although Israel and the Arab States at one time or another voiced their discontent, they also saw some advantages in the arrangement. The nationalization of the Suez Canal and Nasser's turn towards the Soviet Union for arms led to dramatically altered circumstances, and the restraints broke down. The clear lesson of this attempt at arms control, which was relatively successful until the Soviet Union stepped in, is the necessity of including all the potential major suppliers. The competitive nature of the arms race in the Middle East and the high stakes involved for the outside Powers make a comprehensive approach that includes all the principal arms exporters essential for success.

The Persian Gulf war of 1991 has created a wholly new policy environment for dealing with the question of arms transfer restraint. The need to prevent the emergence of a new regional threat, such as Iraq was allowed to become, is widely acknowledged by most States. The crea-

tion of the coalition which passed the United Nations Security Council resolutions indicates the willingness of nations with disparate interests and views to come together in common purpose for the maintenance of international peace and stability. The destructiveness of modern weaponry, even when used in a disciplined and restrained manner, has become evident. Regional arms control should now become a central feature of the diplomacy of the Middle East.

There are some reasons to be at least cautiously optimistic about the prospects for regional restraints on arms transfers.

First, the two principal extraregional protagonists, each for its own reasons, have a clear interest in moderating their competition and indeed are already doing so. For both the Soviet Union and the United States, arms sales have been a key instrument of foreign policy for winning friends in the region. Each was looking over its shoulder, making sure that the other did not gain an advantage. With the end of the cold war the traditional rivalry between the two in third world regions has diminished greatly. In the Persian Gulf crisis they have been generally cooperative. Each has an interest in peace and stability in the Middle East.

Secondly, the Soviet Union is in economic crisis and has begun looking for ways to convert parts of its defence industry—which has used up some of its best technical talent and scarce resources—to civilian and consumer-oriented production. Although some of its arms sales have resulted in hard currency earnings, a substantial portion has been in the form of long-term loans and credits, with political purposes as the prime motive. Both conservatives and reformers in Moscow now understand the need to give priority to the pressing needs at home.

Thirdly, the United States has consistently found

itself being asked to arm both Arab States and Israel in a costly and competitive manner. Although the arms sales to Saudi Arabia are indeed true financial sales, the first opportunity that the Egyptians or Israelis have to ask that their debts be forgiven, as during the Persian Gulf war, the request is made to Washington. Political pressures make it difficult to refuse and the Middle East therefore has become the dominant region, on the order of 70 per cent, of United States assistance. There are many Americans who believe that this money should now be spent on urgent needs in the developing countries or in assisting the economic recovery of Eastern Europe.

Fourthly, the insecurity of Israel and some Arab countries such as Saudi Arabia should have been reduced by the sending of more than 500,000 American troops to the Persian Gulf. This was as clear and concrete a demonstration as could be given that the United States is prepared to support key allies in the region if it really becomes necessary. Israel's high state of defence preparedness is a massive drain on its economy, which is only slightly reduced by earnings through its own arms exports. Regional arms control could in time lead to a less militarized State.

Fifthly, the urgency of the crisis created by Saddam Hussein led to a new sense of cooperation by the States within the region. Such diverse nations as Syria, Saudi Arabia and Egypt came together in the coalition. The willingness of Israel to act in a restrained manner has fostered a newly found respect for it and could in time lead to greater acceptance of the Jewish State within the region.

Finally, the effective use of the United Nations and the creation of an ad hoc international coalition against Saddam Hussein shows that cooperative action can be taken in a region containing so many rivalries and political conflicts when there is a common interest. Regional arms

restraints could increasingly be seen as an action of common interest.

Viewed realistically, the establishment of restraints upon arms transfers into the Middle East is a most difficult, sensitive, and complex task. Nevertheless there may now be sufficient common interest among the States that would be involved to make the task worth pursuing.

The best approach would be a supplier-initiated, regionally oriented framework for managing the process of arms sales to the Middle East. Consultations among the suppliers should encompass broad foreign policy considerations, possible conflicts within the region, and the suppliers' evaluation of the local balance of military forces. Initiatives from within the region should be welcomed, but it is likely that it would take the prompting of supplier States to get the process started. A collaborative approach should seek to fully involve the regional recipients in making decisions so as to avoid a sense of discrimination or paternalism. There should be intensive discussions between the producers and the potential recipients concerning the purchasers' security problems and defence requirements. The suppliers should respect any regionally developed plans and be responsive when they seem to be conducive to maintaining international security. But in the final analysis it is the suppliers who have the right to say "no sale!", and they should be prepared to exercise it collectively or individually when necessary.

Multilateral arms restraint cannot of itself prevent a conflict, but it could reduce the risk and help build confidence among the States in the region. Accordingly, arms restraint should be sought in parallel to the negotiations for an Arab-Israeli political settlement. Such restraints could be an important dimension of a comprehensive Middle East settlement, and would help to underpin it. Indeed, arms and politics have become so intertwined in the Middle

East that any lasting settlement may well depend upon restraints on arms sales.

Notes

1 "Baker sketches future Gulf role", *New York Times*, 7 February 1991.

2 Richard F. Grimmett, *Trends in Conventional Arms Transfers to the Third World by Major Supplier, 1982-1989*, Congressional Research Service, Library of Congress, 19 June 1990, pp. 6, 11.

3 *Ibid.*, pp. 54-55.

4 Stockholm International Peace Research Institute, *SIPRI Yearbook 1990, World Armaments and Disarmament*, Oxford, Oxford University Press, 1991, p. 228.

5 "The race to be powerfullest", *The Economist*, 9 February 1991, p. 22.

6 This section draws upon Andrew J. Pierre, *The Global Politics of Arms Sales*, Princeton, New Jersey, Princeton University Press, 1982, pp. 136-209.

Trends in the Proliferation of Sophisticated Weapons and Missile Technology and Their Implications for International and Regional Security

John Simpson

Introduction

The international political world of 1991 differs radically from that of 1989. The withdrawal of the USSR from the role of chief counterbalance to the political and military power of the United States has produced a major structural change in the international system. It allowed the United States–led coalition to engage in a more interventionist policy towards a developing State, Iraq, than was ever conceivable in the pre-1989 context. The new international order that this coalition has created through its actions in the Persian Gulf is, however, one based on western and northern concepts of international peace and security, and upon the original 1944 concept of the permanent members of the United Nations Security Council acting as the "five

This article is based on a paper presented at the United Nations Conference on Disarmament Issues held at Kyoto, Japan, 27-30 May 1991. A compilation of all the papers of the Conference will appear in a forthcoming United Nations sales publication in the *Topical Papers* series.

John Simpson is Professor of International Relations and Director of the Mountbatten Centre for International Studies, University of Southampton, United Kingdom.

policemen of the world" to impose their vision of collective order upon lesser States.

A parallel and related change has manifested itself in the impact of the Persian Gulf war upon global perceptions of both national military capabilities and the ability of the United States–led coalition to coerce other States. The ability of that coalition to defeat an army and air force of the size and with the equipment possessed by Iraq appears to indicate that the gap between the military capabilities of developed and developing States has been slowly but steadily widening. At the same time, the political impact of the use of Scud missiles by Iraq against population centres was out of all proportion to any conceivable direct military effect.

One question which the war has raised is whether the deterrent effects of weapons of mass destruction are now the only capabilities which can prevent a State from having United Nations Security Council coalition enforcement action taken against it, or whether even weapons such as these are neutralized by those possessed by the existing nuclear-weapon States. For if they are, and no other military option for neutralizing such capabilities exists, developing States may have little option but to accept the hegemony of the United States–led United Nations coalition of industrialized States and allies, including Germany and Japan, in the years ahead. While this may arguably enhance the security of smaller States faced with larger regional rivals, it is likely to be seen as detrimental to the security of those States which aspire to positions of regional dominance.

These changes may be counterbalanced in the future by changes in the behaviour of States, from relations based on political power to more cooperative relations. The analysis which follows, however, is written on the premise that most of the "old verities" will continue to operate, if

only to sketch out the consequences if such a change does not occur.

The New Sophisticated Weapons Technologies

The Gulf war in the end proved to be "no contest" because a well-trained, professional military force, the core elements of which were accustomed to operating in an alliance context in Europe, was able to utilize most effectively new concepts and technologies of battlefield management. The application of such concepts was made possible by a quiet revolution in communications, reconnaissance, guidance, and command and control technologies, which has been taking place over the last 20 years.

Although many appreciated that this electronic revolution was occurring, its nature made it almost impossible for non-specialists to evaluate it. For this was not a revolution of the type produced by the appearance of the "Dreadnought" or nuclear weapons. The nature of warfare was not changed overnight by the appearance of a new, discrete weapon, which enhanced the power of any State which possessed it. Rather, it was a revolution which augmented the capabilities of a wide spectrum of existing weapons, as well as enabling their use to be directed and coordinated in a much more effective manner.

The application of electronics to weaponry started with the development of radar in the 1940s, but it was only in the 1960s, with the advent of the transistor and the microprocessor, that miniaturized systems offering great computing abilities and operating with relatively low power consumption could be constructed. Many of the components used were developed through commercial processes for civil purposes. The rate of change in the capabilities of these components was astounding, with each successive generation arriving two to five years after the last. As time

went on, much of the production capability for these components was to be found not in the established European industrialized States and the United States, but rather in States on the Pacific rim such as Japan. Traditional concepts of self-sufficiency in indigenous weapons production proved increasingly difficult to implement for all States, including the United States, as production of electronic components moved elsewhere from that country and Europe, for example, to Japan, the Republic of Korea and Singapore, and also to Taiwan, province of China.

These new electronic technologies have had two major impacts. The first was upon the capabilities of existing military hardware and the second upon the ability of commanders to control and coordinate warfare in a centralized manner on the electronic battlefield. On land, they led to much more precise aiming systems for tank guns and air- and ground-based anti-tank missiles; in the air, to much more precise navigation and weapon-aiming systems in aircraft operable in all weathers; and at sea, to the passing of the gun and to the development of the missile as the major defensive and offensive capability of warships. At the same time they made possible new types of hardware, in particular very accurate mobile ballistic missiles with a capability of destroying reinforced concrete bunkers and other hard targets; small and accurate cruise missiles which could be launched from air, sea or land platforms; and land- and sea-based anti-missile systems. And as more electronics could be packed into missiles themselves, so the necessity for air platforms to carry advanced guidance systems or for them to penetrate to a target declined. The capabilities of aircraft were further enhanced by the advent of "smart bombs", homing in on a point of light from a laser-designator held by someone on the ground or pointed from the air. These developments

also brought forth new electronic countermeasures to confuse or destroy radars and divert missiles from their targets.

These changes did not, however, necessarily enhance the ability of the majority of States to strike effectively beyond their borders. The trend was towards smaller aircraft with less range but the ability to carry heavier external loads of ordnance, fuel and electronics, rather than the development of large, long-range bombers. Although in-flight refuelling for aircraft had been developed from the 1940s onwards, only the air forces of the advanced industrialized States have routinely utilized it fully and have significant fleets of tanker aircraft to support it.

Among others, Argentina, Brazil, Egypt, India, Iraq, Israel, Pakistan, Saudi Arabia, the Democratic People's Republic of Korea and the Republic of Korea, as well as Taiwan,[1] have aspired to develop or acquire long-range booster technology as a basis for ballistic missiles. However, difficulties over the development of re-entry and guidance technology have prevented these efforts from being translated into accurate and viable military weapons, rather than inaccurate weapons of political terror.

It was in the technological infrastructure of warfare, however, and in particular in the exploitation of space, that the most significant changes were taking place. The space satellite spawned many developments with significant military applications: real time reconnaissance vehicles sending TV pictures of any location on the planet back to receiving stations on Earth, and also operating in the infrared and other spectrums to penetrate physical camouflage; portable satellite dishes enabling secure voice and data transmissions to occur over thousands of miles; navigation satellites enabling ships, missiles, aircraft and soldiers to fix their position within metres; and intelligence satellites eavesdropping on communications links.

These capabilities, together with those aloft in

aircraft such as the United States Airborne Warning and Control System (AWACS) and its Joint Surveillance Target Attack Radar System (JSTARS), gave a commander an unparalleled ability to see into the territory of his opponent and gave him the fullest possible information upon which to make command decisions. Such decisions could themselves be simplified by the use of expert systems which preselect what is deemed the significant from the insignificant information in the mass of data available to a commander. They also enabled many different types of force to be operated in an area without interfering with each other, thus allowing an unprecedented level of coordination of offensive and defensive actions and concentration of fire-power to occur. Above all, by no longer requiring all necessary capabilities for offensive and defensive action to be carried on a single platform, they have generated tremendous force multiplier effects—a development which means that the capabilities of the whole are no longer the sum of its parts. It is in the main this force multiplier effect of electronics that distinguishes the military capabilities of the advanced industrial States from those of all others.

The Dissemination and Proliferation of Sophisticated Weapons Technologies

The cold war was largely responsible for forcing the pace of the development and procurement of these new military capabilities, and also for encouraging their competitive dissemination to European allies and to clients around the world. What started as the transfer of surplus Second World War equipment gradually evolved into a traffic in weapons that were in the inventory of the industrialized States, and then into the sale of the most advanced equipment, which in some cases was not even in service with the vendor's national forces. At the same time,

a key issue became the electronic capabilities built into equipment: whether "degraded" versions of this should be fitted to export models, and whether key force multiplier equipment, such as AWACS, should be transferred at all.

While this was taking place, the prospects for new suppliers to enter the market declined. The United States and the USSR have dominated the arms transfer market since the 1950s, with European States such as France and the United Kingdom playing a lesser role. Attempts by States outside this group to develop new advanced military hardware, rather than licence-produce it or adapt existing designs, have not been successful. Indigenous development and production by developing States appears to lead to their having less capable systems, even if this approach gives them reduced dependence upon supplier States for their defence capabilities.

As a consequence, there has been a surprising stability in the supplier base for new military systems over the last 40 years, with new suppliers only making inroads into less technologically advanced areas, such as military training aircraft and armoured cars. At the same time, there has been a desire on the part of several States to licence-build or assemble existing designs originating in the industrialized States, and then produce indigenous developments of them.

Some attempts have been made by certain developing States to place satellites into orbit, and to develop indigenous missiles of the 1950s generation or adapt existing Soviet designs. As yet, however, no attempt appears to have been made to disseminate or licence-produce the new generation of cruise missiles (which would be ideally suited for the delivery of chemical munitions).

The pattern which thus emerges from this brief survey of weapon proliferation is one in which the majority of dissemination has been from the United States and the

USSR to allies and clients. The sources of this technology have been widening, however, especially as more components for advanced military systems are produced by the Pacific rim States, while no significant new suppliers have emerged from among the developing States. Yet it is clear that a market also exists for offensive systems that would be judged obsolete by the advanced industrial States, such as first generation ballistic missiles, like the Chinese-supplied missiles in Saudi Arabia, even if their precise utility is often obscure. Such systems can threaten direct destruction upon the cities of a potential enemy, no matter how far away. One presumes that it is this possibility which recently led the United States to start to reorient its Strategic Defense Initiative (SDI) programme away from countering the threat of a massive USSR missile attack to countering missile threats from developing States against the continental United States and its allies and clients.[2]

Regional Security in the World of the 1990s

The heart of the global security (or some would argue insecurity) structures that persisted from the late 1940s to 1989 was the division of Europe and the ideological and military confrontation there between the United States– and USSR-led alliances. In 1991 this confrontation is in the process of rapid dissolution. The outlines of a new security structure for Europe have yet to emerge, but what is already apparent is that these changes will lead to a reduction in the size of the standing armies of Europe;[3] to considerable uncertainties over the roles, composition, training objectives and future equipment needs of those forces; to a significant reduction in the size of the European arms market; and to consequent pressures upon the defence industries based both there and in the United States and the USSR to either export or transform themselves into civil producers—or face bankruptcy. It also remains

unclear how these changes would affect the ability of any future United States–led coalition both to be seen to be capable of mounting future military operations of the type undertaken in the Persian Gulf area and to be actually capable of doing so.

Three regions retain the seeds of acute conflict and of potential arms races: the Middle East, South Asia and North-East Asia. In the Middle East, the demand for advanced weaponry to reinforce national security remains high in the Syrian Arab Republic and Saudi Arabia, where it is backed by oil revenues, as well as in Israel. In South Asia, the tensions between Pakistan and India show no overt signs of abating, with an added dimension generated by their latent nuclear-weapon capabilities. In North-East Asia the North Korea leadership is isolated, as to a lesser extent is that of China, and threats of uncooperative behaviour, be it over non-acceptance of International Atomic Energy Agency (IAEA) safeguards, nuclear proliferation, or missile sales to the Middle East, may appear to them to be one way of acquiring leverage in this new international system.

In these three regions, indigenous conflict resolution and management mechanisms may be non-existent or unable to hold conflict in check, unlike the European, South American and African cases. This raises the question of the changes in the international security system which might enhance stability in these regional systems. Four such developments seem relevant: the provision of security assurances; the negotiation of regional arms limitation agreements; the creation of supplier controls on the flow of weapons to the region; and the threat or actual use of military intervention.

Security Assurances

An alliance is a traditional method of increasing the military capabilities of a State, and this arrangement has become so institutionalized in Western Europe that any other way of approaching security appears unthinkable. In the cold war system, security assurances could be sought from one or the other bloc leader and, if given, could be relied upon. In the world of the 1990s, however, the competitive incentives for offering and sustaining such assurances seem likely to be lacking.

Although United States actions in the Persian Gulf will make its security assurances more credible, there will undoubtedly remain a concern that the people of the United States will not wish to sustain the role of world policeman indefinitely. Moreover, its continuing budget deficits suggest that the United States may not have the economic base to do so, unless a way can be found for institutionalizing in an acceptable fashion the cost-sharing arrangements negotiated during the Persian Gulf crisis. The alternative is for the United Nations Security Council to provide such guarantees and to operate as an enforcement agency. Can the United Nations Military Staff Committee now be revived to implement such policies? And what would be the nature and composition of such United Nations forces? How could they be financed and armed? To whom would their members owe allegiance? Security assurances thus appear useful, short-term methods of sustaining regional security, but their long-term utility must remain in doubt, owing to uncertainties over the willingness and ability of those providing them to actually implement them.

Regional Arms Limitation Agreements

The major problem facing all arms limitation agreements in the post-1989 world is their conceptual basis. Bilateral United States–USSR nuclear arms control negotiations from 1970 onwards could operate on the basis of sustaining crisis stability, reducing perceptions of a threat of surprise attack and retaining rough parity of numbers of launch vehicles or warheads. Similarly, the negotiations on mutual force reduction in Central Europe and later on the talks on conventional armed forces in Europe could proceed on the basis of rough equality of numbers on either side of the geographical line between the two blocs. Of equal significance, however, may have been the confidence-building measures instituted under the Conference on Security and Co-operation in Europe (CSCE), which, among other things, sought to alleviate fears of surprise conventional invasions being mounted under the guise of exercises.

In Europe now, and in most other areas of the world, the problem confronting arms limitation agreements is what to limit and on what basis. What is more difficult to evaluate, however, is what might constitute a stable and safe military relationship between the States involved, one that could be sustained by arms limitation measures.

There does seem some case for arguing for limitations on fixed-site missiles, the existence of which may create incentives for pre-emptive attacks, and on longer-range attack aircraft, as well as on the overt possession of nuclear weapons. The new electronic technologies pose something of a dilemma, however. On the one hand, they may make activities within the borders of a potential enemy more transparent, thus providing assurances that mobilization for an attack is not taking place, and by doing so deter such an attack, but on the other hand, they could make an attack more effective.

Underlying the difficulties facing arms limitation agreements is a more profound issue: how to identify the capabilities that differentiate an effective military capability from a less effective one. One implication of the Persian Gulf war is that counting numbers of apparently similar weapons may give little indication of their true capabilities. Indeed, it may legitimize the superiority of the State with more advanced systems and an effective electronic infrastructure. Thus the task for the future may be to try to bring such qualitative dimensions of weaponry into arms limitation negotiations and agreements, perhaps through restrictions on testing, operational simulations and exercises.

Supplier Controls on the Flow of Weapons

It was recognized as early as 1918, during negotiations on the establishment of the League of Nations, that effective enforcement action by an international organization would be feasible only if arrangements were made to limit the armaments of those States against which such action might be taken. Given that the majority of Iraq's advanced armaments were transferred to it from other States, though some of its missiles appear to have been indigenously produced, there has been a strong move in the United Nations and elsewhere since the end of hostilities to place restrictions upon exports of arms to the Middle East region and on a global basis. However, a number of issues need to be addressed before such restrictions can be implemented.

The first quite simply concerns the criteria to be used to allow or disallow transfers of arms. In particular:

—Is a distinction to be made between offensive and defensive hardware, or between stabilizing and destabilizing equipment, so that, for example, United States Patriot

anti-missile systems may be transferred, but Lance short-range bombardment missiles may not?

—Are transfers to be allowed to allies, but disallowed to others?

—Is licence-production or collaborative production counted as a transfer?

—Are transfers of certain types of hardware to be banned, such as ballistic missiles or AWACS and JSTARS aircraft? If so, is production of these missiles and aircraft also to be banned, and existing stocks destroyed? What sanctions are to be imposed on suppliers breaching the ban?

—How is dual-use equipment to be dealt with, especially when it has a legitimate civil function? To deny it to a State may also involve denying that State's "inalienable right" to technological development.

Underlying these apparently pragmatic questions are other issues. They relate to the nature of the existing nation-State system and its theoretical and actual modes of operation. All States have a right to make preparations to sustain their national security and to determine for themselves the arms and military manpower they need for this. It would be a denial of that sovereignty for others to make that judgement for them. The only constraint on this right is the international ethical and practical opposition to non-conventional weapons of mass destruction, which has resulted in sustained efforts to impose global bans upon them.[4] It follows logically from this that all States have a right to ask for conventional arms from others and to produce them indigenously. Equally, however, no State has a duty to supply arms to others if it does not choose to do so.

The existence of such rights and duties inevitably leads to contradictions. By denying weapons to a recipient State, a supplier may reduce its security, while the recipient

has no method of reciprocally denying security to the supplier. Thus any system of arms transfer constraints will inevitably be viewed as challenging the national sovereignty of would-be recipient States and enhancing the supplier's power over other States.

The United Nations system, as seen from the General Assembly, is one based on the sovereign equality of States. As viewed from the Security Council, however, it is one where the most powerful States act as a global executive authority. The year 1991 has seen the Security Council starting to play some of the roles the founders of the United Nations, in 1944, intended it to play. The international political system that can now be argued to be emerging is one in which small and relatively powerless States are likely to be subject to enforcement action unless they conform to the rules laid down by the more powerful, and one in which restrictions upon the armaments of such lesser States will be seen as acceptable and legitimate in the interests of regional stability and global order, whatever their implications for more traditional ideas of State sovereignty.

This still leaves the practical problem of which transfers and indigenous production to prevent and why. As the case of Iraq has indicated, bans on the possession of weapons of mass destruction and ballistic missiles with ranges of more than 70 kilometres seem likely to generate support. There continues to be a dilemma, however, over whether such bans should be imposed ones, with the permanent members of the Security Council and some of their allies retaining the capabilities denied to others, or consensual bans. In addition, there is the issue of how to handle the civil applications of many of these technologies. Space satellites are a case in point, for would all States have a right to launch those with military, as well as civil, applications? Regimes similar to the nuclear non-proliferation regime

would seem to provide some guide with regard to how to proceed, yet the history of this regime indicates that any apparent legitimization of the possession of a military technology by some but not by others is bound to generate acute political difficulties.

A further practical and philosophical question is whether both transfers of weapons and their indigenous production should be banned, or just transfers alone. Again, a ban on one but not the other is blatantly discriminatory, but many would regard it as justified in the new circumstances, especially if it facilitates enforcement actions.

One oddity of this situation is that in a world where the market economy, democracy and self-determination are seen to have triumphed, there is now a strong thrust to impose limitations on the market in arms. In part this is possibly a reaction to an uneasy feeling that the new electronic military technologies are taking control of weapons development and manufacture away from traditional national armaments processes and into areas that are neither national nor entirely military: the "merchants of death" may be about to make a reappearance, and the State has to reassert itself in this context. In part it is also a concern that conventional technology may be used to deliver weapons of mass destruction. The latter has been the overt justification for attempting to expand the Missile Technology Control Regime (MTCR) beyond its Western founder supplier States.

Military Intervention

The clear message emerging from the Iraq-Kuwait crisis is that external intervention legitimized by United Nations Security Council resolutions is now feasible. This realization seems likely to have two different effects. On the one hand, it should deter States contemplating chal-

lenging the United States–led coalition's interpretation of the "new international order". For example, it might give a State the message that if it aspires to acquire nuclear weapons, it had better keep its facilities clandestine and not give the United States or one of its coalition partners any excuse—such as involvement in a conflict—to destroy them. On the other hand, it raises the question of how long the United States will have the political will and resources to sustain the role of military coalition leader, and at what point the coalition of interests it has capitalized upon, in particular the consensus among the permanent members of the Security Council, will start to erode. Will there ever again be such an uncomplicated political and military context for intervention as the crisis in the Persian Gulf proved to be, with minimum casualties among the intervening forces? What will happen if the next situation deteriorates into a Viet Nam or Afghanistan?

Conclusions

The last two years have seen two revolutions take place in parallel. One has been the withdrawal of the USSR from Eastern Europe and the emergence of new democratic regimes there, as well as the slow dissolution in the West of the image of the USSR as an ideological enemy. The second has been the harnessing of electronics and space satellites to conventional weaponry, a development that, in the hands of a well-trained professional military, has produced a force multiplier effect that appears almost impossible to evaluate in advance.

Taken together, these changes suggest that a new international system may now be emerging, based upon the threat of international enforcement action led by the United States and legitimized by the United Nations Security Council. Such a system would, however, be discriminatory and based upon concepts of order held by

States in the industrialized world. Regional security organizations seem likely to develop in several areas, as envisaged in the Charter of the United Nations, but in others they may need to be underpinned by external security guarantees and other forms of external intervention. Arms limitation agreements may form part of these security systems, but they seem unlikely to involve traditional counting of equal numbers of like systems on either side. Rather, they may be based on such activities as confidence-building measures and measures to provide greater transparency, as well as on establishment of demilitarized zones.

Global attempts to limit arms transfers and production seem likely to be part of this new international system, especially given significant reductions in defence expenditure by the United States, the USSR and European States. These will be predominantly imposed supplier controls of a discriminatory nature, though some attempts may also be made to build consensual regimes around them.

How long such a power-political, rather than cooperative and consensual, regime based on United Nations Security Council resolutions will survive is open to debate. It threatens to change the United Nations in a fundamental way. For many years, the General Assembly has been used by the leaders of developing States to attempt to impose constraints upon the developed States, especially the United States. Now that State and its associates may, in turn, be able to use the Security Council to impose constraints upon the rest of the world. Enforcement action, in support of the vision of international and regional stability and security held by the dominant global coalition, now appears feasible against most developing States. This will have the positive effect of enhancing the security and autonomy of militarily weak developing States, such as Kuwait, but will place significant limitations

on the aspirations of the larger and stronger States which have been leaders of the developing world. The danger is that unless new processes and institutions for conducting world politics can be rapidly agreed upon, these aspiring regional Powers will feel alienated from this new system. The challenge that now faces the international community is to construct a new regime while yet avoiding such alienation.

Notes

1 For a listing of such capabilities, see Martin Navias, *Ballistic Missile Proliferation in the Third World* (Adelphi paper 252), London, International Institute for Strategic Studies, Summer 1990, pp. 29-31; and Aaron Karp, "Ballistic missile proliferation", Stockholm International Peace Research Institute, *World Armaments and Disarmament: SIPRI Yearbook 1990*, Oxford, Oxford University Press, 1990, pp. 369-391.

2 "Ballistic missile defence shifts to cover theatre/tactical threats", *Aviation Week and Space Technology*, 18 March 1991, pp. 54-55.

3 The United Kingdom's Defence White Paper of February 1991 reported plans to reduce manpower in the Army by 25 per cent, the Air Force by 16 per cent and the Navy by 5 per cent by the mid-1990s.

4 For an extended discussion of these issues see John Simpson, "The nuclear non-proliferation regime as a model for conventional armament restraint", in Thomas Ohlson, ed., *Arms Transfer Limitations and Third World Security*, Oxford, Oxford University Press, 1988, chap. 14.

Challenges of Defining Security

Defining "Global Security"

Michael D. Intriligator

Introduction

A proper definition of security, including the definition of the newer concept of "global security", must take account of changes in the world situation, including an explicit recognition of past threats and present instabilities. This paper attempts to identify these past threats and present instabilities and other changes in the international situation in order to suggest a reconsideration of the entire nature of national and international security. In particular, it considers how security should be defined for the 1990s and into the next century. In doing so, it suggests a set of nine "globalizations" of various aspects of security, which might be part of the definition of "global security".[1]

Past and Present International Threats

Past international threats have included, for over four decades, the cold war threat of the Soviet Union and the Warsaw Pact; the Soviet domination of Eastern Europe; and various regional crises and wars in the Middle East, the Persian Gulf, South-West Asia, South Asia, South-East Asia, and the Korean peninsula. Now, how-

Michael D. Intriligator is Professor of Economics and Political Science and Director, Center for International and Strategic Affairs, University of California, Los Angeles. This paper is based upon a presentation to the Eleventh American-German Roundtable, "Security and Economic Challenges Facing the Transatlantic Community in a Changing World", held in Washington, D.C., 11-13 April 1991.

ever, the revolutionary changes in the Soviet Union under President Mikhail Gorbachev have led to the end of the cold war; the Warsaw Pact is defunct; and the "falling dominoes" sequence of revolutions in Eastern Europe in 1989 have ended the Soviet domination of Eastern Europe. As to regional crises and wars, while they still exist, their nature and future resolution may have changed as a result of the 1990-1991 Gulf crisis and war.

While these fundamental changes in the international situation have significantly reduced the threat of East-West conflict, problems of security still remain. Indeed, the 2 August 1990 invasion of Kuwait by Iraq provided a timely reminder that there still remain security problems, particularly for those individuals who, in the euphoria over the end of the cold war, thought that such problems were a relic of the past. In fact, there are several present instabilities that represent potential security problems, some of which are themselves outgrowths of the termination of past threats. The end of the cold war has, in some respects, made the world a more dangerous place.

First among the present instabilities is the danger stemming from the Soviet Union being on the brink of total economic, political, and social collapse. As a result there is the potential for internal insurrection and conflict stemming from power struggles between the union or centre, on the one side, and republic or local authorities, on the other; between different political forces; between different ethnic groups; and between yet other divisions. Their struggles and potential conflict could lead to a civil war, with possible conflicts over the control of weapons, including even nuclear and chemical weapons. In such a situation there could be a danger of an accidental nuclear war. Some Soviet military experts are even currently arguing for the continuation of major military capabilities just in case there will be a Western invasion to quell a Soviet civil war. At the

same time, some Western military experts are calling for the continuation of their major military capabilities in the event of a reconstitution of the Soviet threat to Western interests. It would be hard for the rest of the world to avoid involvement in case of a Soviet civil war because of the presence of strategic nuclear weapons and the dangers of accidental launches of these weapons; the problems stemming from huge numbers of refugees; the possible use of international incidents to take pressure off the domestic situation; and the conceivable eventual takeover by a strong man, a new Stalin. This new dictator might foment trouble abroad and resume the cold war for the same reason that Stalin did, namely, the value of a foreign threat in order to justify repression at home, where such repression will be seen as necessary in order to keep the country intact.

Second among the present instabilities is the danger stemming from a civil war in Yugoslavia. In some respects the situation is similar to that of the Soviet Union, involving ethnic conflicts and failed economic, political and social policies, but, fortunately, without the involvement of nuclear weapons. Nevertheless, major-power involvement in the Balkans could lead to a wider conflict, as in the beginning of World War I.

Third is the potential for instability in Eastern Europe, which faces extremely severe economic, political, and social problems. The revolutions of 1989 led to the advent of democratic governments in most of Eastern Europe, but world history has seen other cases where a first revolution leading to democracy was followed by a second revolution leading to some sort of totalitarian regime, particularly when there is great disaffection and unrealized expectations among the populace. This is precisely the present situation in Eastern Europe. Just as the people of these States have rejected the communist model in view of its

failures, some may also reject the democratic model, given its own failures, in favour of, possibly, fascism, which lurks beneath the surface in some of these States. There are yet other types of potential instability in Eastern Europe, including the possible creation of major arms export industries and the development of nuclear weapons in some of these States now that they are free from the domination of the Soviet Union, which formerly had regulated such matters.

Fourth is the potential instability in China following a failed revolution, which has led to disaffection among its population. As in the case of the Soviet Union, there is the potential for civil disturbances and civil war in a nuclear-weapon State, creating the possibility of a struggle for control, or even a loss of control, of nuclear weapons. There could be, in this situation, the deliberate or accidental use of these weapons, with world-wide effects.

Fifth is the potential for conflict on the Korean peninsula, which remains a divided nation even as previously divided nations, including Viet Nam, Yemen, and Germany, have been reunited. There is now the potential for the development of nuclear weapons by the Democratic People's Republic of Korea (North Korea), while the Republic of Korea (South Korea) has for some time had the capacity to build such weapons.

Sixth are the remaining instabilities in other regions of actual or potential conflict, including various ongoing civil wars taking place in many places in the world. Of particular concern are the conflicts of the Middle East, which, in fact, extend over the wider arc of the Islamic world, from North Africa to South-West Asia, ranging from Morocco to Pakistan.

All of these present instabilities must be taken into account in defining "global security", but there are other changes in the international situation that must also be

considered. Of particular importance is the fact that modern systems of communication and transportation have made the planet highly connected and interdependent. As a result of both global instabilities and global interdependencies, traditional methods of ensuring security have become less and less relevant, and policy makers and analysts alike are trying to develop new mechanisms for security. The traditional methods apply to military security, largely in the East-West context of the cold war, and mainly to Europe. In fact, now is a time of immense opportunity, a time in which policy makers can reshape the world. One would have to go back over four decades, to the period immediately after World War II, to find a comparable period of change, uncertainty, and opportunity. The challenge now is to create a new system of global security, reflecting current world realities, particularly the fundamental changes that have occurred in the international system in the last few years.

The "Globalization" of Security

A necessary step in the further development of security studies will, however, be the most basic one of simply defining "global security". This paper suggests nine aspects of a definition of "global security" in order for the concept to be relevant for the 1990s and into the next century. Each takes the form of the "globalization" of a certain aspect of security, involving interpreting this aspect of the subject in a global way.

The first globalization relates to the concept of security itself. Because of global interdependence, it is necessary to treat security from a global perspective, rather than from a national or even an international perspective. Thus, the traditional concepts of "national security" and "international security" must be replaced by the newer concept of *"global security", defined here as the absence of*

or avoidance of threats to the vital interests of the planet. The world is so connected and integrated that it is impossible to confine security to national frontiers. In particular, security is not gained at the expense of another State but, rather, in conjunction with security of other related States. Using the language of economics, security is a type of public good, where more security for others does not diminish one's own security. In earlier periods, national security was frequently cited as an example of a public good, a type of good for which one person's consumption of more of the good did not diminish the consumption of the good by another person. Currently, however, this type of interpretation can be given at not just the national level of individual people, but also at the international level of individual nations. Thus, global security, if it can be achieved, is an international public good, for which more security for one nation does not mean less security for another.

The second globalization relates to the content and substance of security, which must be extended well beyond the traditional military dimension. Global security must treat, as part of its legitimate concerns, the interrelated military, political, economic, environmental, and other threats to the vital interests of the planet. Even within the narrower and traditional definition of security, involving the prevention of military threats to the vital interests of a sovereign nation or group of allied nations, there are broader challenges to global security stemming from military instability, including border and other regional conflicts, internal ethnic conflicts and civil wars, and terrorism. Of particular concern is the possibility of insurrection, confrontation and civil war in nuclear-weapon States, such as the Soviet Union and China, which could lead to nuclear threats, use of nuclear weapons, and even an accidental or inadvertent nuclear war. Beyond these military

threats, there are political threats and other threats to the vital interests of the planet that must be treated as part of global security.

The third globalization relates to the regions of security concern. The major focus of security concerns over the last fifty years has been Europe. Now, however, it is necessary to treat not just the security problems of Europe but also those of other regions, particularly regions of actual or potential conflict in the third world, including the Middle East, South-West Asia, South Asia, South-East Asia, North-East Asia, the Horn of Africa, and Southern Africa. A major area for global security concern is the Middle East, including the Gulf, in view of its geostrategic location, its oil resources, the weapons in the region, and the several fundamental conflicts and antagonisms of the broader region, which, as noted, extends over the arc from North Africa to South-West Asia. The Gulf crisis and war have focused world attention on this region, but it should not be forgotten that the war between the Islamic Republic of Iran and Iraq was, in terms of casualties, the third largest war of the century. There also remain the continuing Arab-Israeli conflict, the problem of the West Bank and Gaza, the issue of the Palestinians, the question of the future of Lebanon, the influence of Muslim fundamentalism, and various Arab-Arab conflicts. The Gulf crisis and the resulting war may, in fact, be only a precursor to a whole series of regional crises into which the United States, the Soviet Union, and other nations could be drawn. It could also be a precursor to a wider North-South conflict, pitting the industrialized North against the developing South economically, politically and, possibly, even militarily.

The fourth globalization relates to the mechanisms used to achieve security, where an increasingly important mechanism to achieve this goal is that of international cooperation, understood here to mean coordinated action

among two or more nations so as to achieve a common goal. Such international cooperation provides a major mechanism for dealing with global problems and achieving global goals, including those of global security. For example, traditional bilateral Soviet-United States cooperation in the area of arms control and non-proliferation has been extended to cooperation in regional crisis management, including not only in the Gulf crisis and war, but also in Namibia, Cambodia, and other regions. Such Soviet-United States cooperation can be an important step towards wider international cooperation to treat global problems, including not only military threats, but also other threats to the vital interests of the planet.[2] In general, multilateral cooperation is a basic mechanism for achieving global security, where past instances of such cooperation have included the formation of the North Atlantic Treaty Organization (NATO) and the Warsaw Treaty Organisation (WTO), the nuclear non-proliferation regime, and the Missile Technology Control Regime; the Organisation for Economic Co-operation and Development (OECD) and the G-7 system for international economic cooperation; and the cooperation of allied nations and forces in the Gulf crisis and war. Newer mechanisms of multilateral cooperation will have to be developed to deal with other threats to global security. In fact, international cooperation could represent a new paradigm for global security, replacing earlier approaches to national and international security.

The fifth globalization relates to the institutions needed to achieve security. To achieve global security it is necessary to rethink the institutions that could be used to solve the collective action problem of obtaining the optimal amount of a public good. In particular, global security must reconsider the role of regional and international institutions as a means to achieve the goal of global security. The

United Nations has emerged in the recent past as an important body for settling regional conflicts and for countering aggression, the role that, in fact, was originally intended for it, particularly through the Security Council. At the regional level, the Conference on Security and Co-operation in Europe has the potential of playing a much greater role in European security, and similar new institutions could be developed for other regions of the world. Similarly, existing and new regional and international institutions could play important roles in addressing both military and non-military threats to the vital interests of the planet.

The sixth globalization relates to the changes in the distribution of power. Global security must take account of such changes in the distribution of power that have occurred in the international system. The bilateral era of "super-Powers" is over, given the fundamental changes that have occurred in the Soviet Union and the less fundamental but nevertheless substantial changes that have occurred in the United States, including budget and trade deficits and reductions in defence budgets. In its place is the multilateral world of several global Powers. The Soviet Union and the United States will continue to have important influences on global security, and the continued transformation of their bilateral relationship from one of confrontation to one of cooperation could play a major role in ensuring global security. Meanwhile, the economic and political integration of Europe has resulted in its becoming truly a global Power militarily, politically, and economically. Both Western Europe and the newly emerging Central Europe will be dominated by the newly unified Germany, which is the major Power of Europe in terms of its economic and financial strength, its population base, its geostrategic situation, its military capabilities, and its leadership abilities. At the same time, Japan has become a

major global Power in terms of its economic impacts, and it is beginning to have major impacts in other areas as well, such as in its political influence. China also must be taken into account as a major global Power in view of its population base, its economy, its geostrategic situation, and its potential to influence other States. Thus, any study of global security will have to account not just for the United States and the Soviet Union, but also for Europe, Japan and China, which are playing increasingly important roles in addressing military, economic, environmental, and other threats to the vital interests of the planet.

The seventh globalization relates to arms control as one approach to global security. The main emphasis of arms control over the last two decades has been on bilateral approaches to strategic and intermediate-range nuclear weapons, as exemplified by the SALT (strategic arms limitation talks), INF (intermediate-range nuclear forces), and START (strategic arms reduction talks) negotiations and treaties. It is now necessary to treat a broader global agenda for arms control, involving not only these bilateral approaches to nuclear weapons, but also multilateral and unilateral approaches to nuclear, chemical, and conventional weapons on a world-wide basis. Furthermore, the traditional bilateral approaches might be modified to become a process, moving from arithmetic "bean counting" to a more conceptual approach, emphasizing strategic stability and moving from compartmentalized bilateral forums to a broader multilateral forum for negotiations.[3] As to newer approaches to arms control, the conventional forces in Europe agreement may be useful in setting a precedent or example for similar multilateral negotiations on limiting conventional military capabilities in other regions. While the negotiations in Geneva on a chemical weapons convention have correctly emphasized the importance of controlling such weapons world-wide, it is urgent

to prohibit not just their development, production and stockpiling, but—what is even more urgent—their use. In addition, there must be new initiatives in the area of arms control to deal with the problems of accidental or inadvertent nuclear war, weapons and delivery system proliferation, and arms transfers. A major problem of global security for the 1990s and into the next century will be the proliferation, via indigenous development or imports, of both nuclear and chemical weapons and sophisticated missile and aircraft capabilities for their delivery. There could, in the coming decades, be a major spread of such weapons, followed inevitably by threats to use them or even the intentional or accidental use of these weapons, particularly in regions of instability. Countries in these regions are increasingly making or obtaining, via international trade, advanced conventional weapons, chemical weapons, advanced military aircraft, missiles, and even components and technologies essential for developing nuclear-weapon capabilities. The international trade in arms now includes sales on a purely commercial basis, with no strings attached, such as the major transfer of intermediate-range missiles sold by China to Saudi Arabia and delivered just when the INF Treaty was being ratified. Various economic, political, and security changes in the United States and the Soviet Union have made them less capable of controlling their traditional "client" States, including limiting access of these States to nuclear-weapon-related technologies. Furthermore, there will be enormous pressures on both the United States and the Soviet Union and on other States to sell weapons to the third world, rather than closing down or converting military production lines and destroying existing military stocks. Arms control provides a valuable way to deal with these issues and thereby to avoid their implied threats to the vital interests of the planet.

The eighth globalization relates to the non-military

problems of global security, including economic, environmental, and other problems of global security. Economic threats to global security, stemming from global economic interdependence, include the implications of a widening of the international debt crisis, lack of international liquidity, vulnerability to control over strategic resources, major balance of payments deficits, the possible collapse of certain national economies, the possible failure of major international financial institutions, the possible use of traditional and newer barriers to international trade and international movements of capital, and potential trade wars. Environmental threats to global security, stemming from global environmental interdependence, include global warming as a result of the greenhouse effect, damage to the ozone layer as a result of the release of CFCs, and the potential effects of accidents or sabotage at nuclear power or other nuclear facilities. Other threats to the vital interests of the planet include international terrorism and international drug trafficking. Of particular importance are the relationships among military, economic, environmental, and other threats to global security, with each both influencing and being influenced by the others.

The ninth globalization relates to the theory of security. It will be necessary to formulate new theories and analytic frameworks for global security to replace traditional theories of security, such as containment, balance of power, deterrence, and hegemonic stability. These new theories will have to take explicit account of global interdependence, the nature of newer threats to security, changes in the distribution of power, and the bilateral and multilateral relations among the great Powers. An important aspect of these new theories may very well be international cooperation as a mechanism for achieving global security, which can be studied using the techniques of game

theory, simulation, and other analytic approaches. Another aspect of these new theories will focus on the interaction between domestic politics and global security, building on the empirical observation that liberal democracies generally do not engage in war with other liberal democracies and thus suggesting the value of this form of government for global security.

These nine "globalizations" of aspects of the definition of security all point to the need for a reconceptualization of the entire concept of security as one of global security. This new conceptualization of security as global security must involve each of these nine issue areas: (1) the concept of security; (2) the content and substance of security; (3) the regions of concern; (4) the mechanisms used to achieve security; (5) the institutions needed to achieve security; (6) the changes in the distribution of power; (7) the purpose and methods of arms control; (8) the non-military problems of global security; and (9) the theory of security.

Notes

1 For related discussions of the concepts of national, international, and global security, see Sorensen (1990) and Haftendorn (1991). The Haftendorn article, which is based on the author's 1990 presidential address to the International Studies Association, provides an overview of the literature on security dating back to De Grotius's 1625 *De Iure Belli ac Pacis*, Hobbes's 1651 *Leviathan*, and Kant's 1795 *Zum Ewigen Frieden*, but emphasizing the literature on this subject in the 1970s and 1980s.

2 See Goldanskii and Intriligator (1989) and Intriligator (1989, 1990).

3 See Intriligator and Brito (1989, 1990).

Bibliography

Goldanskii, Vitalii I., and Michael D. Intriligator, "U.S.-Soviet relations: from confrontation to cooperation through verificational deterrence", in H. Saller, ed., *Erkenntnis und Engagement*, Festschrift für Hans-Peter Dürr, Munich, 1989.

Haftendorn, Helga, "The security puzzle: theory-building and discipline-building in international security", *International Studies Quarterly*, 35(1) (March 1991), pp. 3-17.

Intriligator, Michael D., "Perestroika and the West", *Peace Review* (Fall 1989), pp. 24-29.

Intriligator, Michael D., "Prospects for cooperation", in Anatoly A. Gromyko and C. S. Whitaker, eds., *Agenda for Action: Africa, Soviet, U.S. Cooperation*, Boulder, Lynne Rienner Publishers, 1990.

Intriligator, Michael D., and Dagobert L. Brito, "Arms control," in Edward A. Kolodziej and Patrick M. Morgan, eds., *Security and Arms Control*, Volume 1, Westport, Greenwood Press, 1989.

Intriligator, Michael D., and Dagobert L. Brito, "Accidental nuclear war: a significant issue for arms control", in Derek Paul, Michael D. Intriligator, and Paul Smoker, eds., *Accidental Nuclear War*, Toronto, Science for Peace, 1990.

Sorensen, Theodore C., "Rethinking national security", *Foreign Affairs* 69(3) (Summer 1990), pp. 1-18.

Security Systems for the Prevention of War

Sayidiman Suryohadiprojo

Security Problems will Remain Forever

When the cold war between the Western and Eastern European blocs ended, many people predicted that war would be something of the past. However, even with the dramatic changes in relations between the United States and the Soviet Union and more cooperation in the Security Council, will there be no security problems anymore in the future, including armed hostilities among nations?

After every war there are people who want to build a lasting peace. After the First World War the League of Nations was established, and after the Second World War, the United Nations was founded. The reality, however, is that we still have war. The very creation of the United Nations was clear evidence that the League of Nations had failed in its purpose to end war.

The fact is that, besides the people who want the end of war, there are those who see war as an effective instrument to achieve their objectives. They are always ready to exploit every opportunity to strengthen their position, if necessary by the use of violence. The history of this century illustrates this point. As soon as the Second World War was

Sayidiman Suryohadiprojo, a retired Lieutenant General in the Indonesian Army, is Advisor to the Minister of Research and Technology, Jakarta, Indonesia.

finished, the world was faced with a very dangerous confrontation between the United States and the Soviet Union. Mankind has been spared a third world war, not because people did not want to fight anymore, but because of the possibility of mutual assured destruction by nuclear arms. In the midst of the global cold war that followed the Second World War, some regional or "real" wars did erupt, initiated in the framework of the global strategy of the two competing camps. Although the United States and the Soviet Union were always very careful to keep them from escalating into global nuclear conflict, these limited wars were large enough to cause the death and sorrow of millions of people.

The world will continue to be troubled by many kinds of security problems for a long time to come. The difference will be that in the future the problems will be more related to regions. Thus, the main task will be to prevent wars at the regional level. The fact that wars at the regional level can be disastrous has been proved by the eight-year long Iran-Iraq war and the war in Viet Nam.

High-Tech Weapons and Arms Transfers

There has always been a close connection between security problems and weapons. There are nations and leaders of nations who believe in the old Roman adage, "Si vis pacem, para bellum" (If you want peace, prepare for war). The possession of a large amount of armaments is, however, like a double-edged sword. It can provide an adequate defence, but it can also lead to a more ready resort to violence. It can foster an aggressive attitude on the part of a country, especially if its leaders have very ambitious national objectives. We can therefore draw the conclusion that security problems will develop into wars or the use of violence if there are many weapons available. "Si vis pacem, para bellum" is valid only to a certain degree.

The preparation for war may lead to war instead of to peace.

The development of technology has a great impact on the effectiveness of weapons and on their production. Weapons technology is today already advanced. The fact that it is developing at a faster pace than ever before will further increase its impact on the effectiveness of weaponry.

However, the improvement of weapons technology has not made weapons cheaper. On the contrary, they have become much more expensive. For example, the price of the rifle, the basic weapon which developed from the muzzle loader of the past into the fully automatic rifle of the present, has increased more than one thousand times. It is therefore obvious that nations with large amounts of weapons systems are sacrificing the improvement of their standard of living. A great deal of resources have to be used if a nation is interested in building up strong and modern military forces.

Advances in technology have made weapons more deadly. With the creation of nuclear weapons, for example, came the possibility of total destruction, even at the global level. That was the main reason why there was no real war between the United States and the Soviet Union, although both were in the possession of large numbers of nuclear and conventional weapons and their confrontation was often very intense. Neither side wanted to take the risk of becoming the object of nuclear attack, and each knew that the other could launch a counter-attack with nuclear weapons if it were attacked first. Nobody wanted to start a war in which both sides could be annihilated.

In addition to nuclear arms, there are chemical and biological weapons—all of which are considered to belong to the category of weapons of mass destruction. But conventional weapons, too, have become much more power-

ful. The rifle has already been mentioned. The weapons systems of land, naval and air forces are products of advanced technologies. We have aircraft that cannot be detected by radar; we have nuclear submarines that remain submerged while circumnavigating the world; and we have satellites in outer space with which we can observe every part of the globe.

Electronics plays a role of the utmost importance. On the one hand it improves observation, as the use of satellites and radar demonstrates. On the other hand, it can perfect a weapon's guidance system. Technology has been able to deliver precision guided munitions. Such technology permits almost any weapon system to become a point target weapon, and so with the same amount of ammunition, more destruction can be achieved at the desired target. The artillery gun, which was an area weapon in the past, can now become a point weapon if there is an appropriate guidance system for each round. The existence of such high-tech weapons has made surprise attack much more likely than in the past. An intercontinental ballistic missile could reach its target within only about 30 minutes, with an accuracy of within 30 metres.

Surprise attacks with conventional weapons can also be performed with a high degree of effectiveness. That fact has political implications. It gives ambitious leaders the possibility of achieving their objective by a *fait accompli*. That endangers the security of other nations, especially one's immediate neighbours. It is therefore to be expected that ambitious leaders of nations accumulate the most up-to-date weapons systems to impress and impose their will on other nations, or they can use them to make war, if the other side cannot be impressed.

The situation is advantageous for weapons manufacturers and traders. To achieve economies of scale they need a large market. The more they can sell, the more they

can produce; and the more they can produce, the more economic benefit they will gain. They need economic benefit to maintain a high degree of research and development activities. Since technology is now developing so fast, a certain product may become obsolete after five years. New products with greater effectiveness will appear as a result of improved technologies. Without research and development, manufacturers will not be able to compete with other manufacturers. Therefore every manufacturer is interested in selling the maximum number of products. Since weapons production is a component of the security of the nation possessing that industry, nations with defence industries are interested in exporting as many weapons as possible. Thus, one sees that the biggest weapons exporters are also the advanced industrial nations, namely, the Soviet Union, the United States, France and the United Kingdom. Since weapons and, especially, ammunition can best be sold if they are widely used, it is obvious that weapons manufacturers and perhaps their Governments are interested if there are many security problems. Of course, no one will ever admit that openly.

So it is safe enough to conclude that weapons are playing an important role—if not the most important role—in the existence and perpetuation of security problems in the world. It is therefore understandable that people who are interested in peace are always thinking of disarmament. But because at the same time other people are interested in the manufacturing and selling of weapons, disarmament has remained an empty and hollow word. There are also enough ambitious persons in developing nations who are capable of manipulating other people's sentiments in order to become leaders of their nations. Ambitious and militant leaders on the one hand, and aggressive weapons manufacturers on the other, are the main actors in generating security problems.

Future Security Structures

Given the fact that security problems will be with us forever, the problem we face is how to prevent the eruption of wars. We cannot take MAD or Mutual Assured Destruction as a model, because that method has proved too expensive and much too dangerous. We must find other ways and means for preventing wars. As developing nations, we cannot afford to spend too much on defence and armaments, because it would harm our efforts to create greater prosperity. But we should have the means to achieve stability, because it is a *conditio sine qua non* for creating prosperity. We must have security structures at the national, regional and global levels. The security structures at each level should be compatible with one another.

At the national level we must establish national resilience. National resilience is a condition which makes a nation politically, economically and militarily strong enough to withstand threats and challenges to its survival coming from other nations as well as from inside. National resilience is based on an integrated effort on the part of all the people to defend and to maintain the security of their country. Military strength alone, without strong solidarity among all groups in the society, will not suffice. It is much better to have a small military force backed by a united society, than to maintain a large but expensive defence establishment and a society full of social and economic disparities and further weakened by political contradictions. The first situation would make the nation hard to crack from outside, while the second would make it very vulnerable from within. The aim of national resilience is to achieve the right balance between prosperity and security-producing national strength, a balance which will force any offender to think at least twice before risking an attack. If attacked, the nation will fight single-mindedly using guerrilla warfare, if necessary, to defend itself. Such determina-

tion will deter other nations from cultivating negative intentions.

The security concept for the individual nation should be enhanced by a regional security structure. Regional security arrangements should be formed with the following purposes:

—First, cooperation among nations within a certain region should create better understanding and allow a more precise evaluation of each nation's intentions and capabilities. That would prevent misperceptions and unnecessary suspicions. If one of the members of the association has ambitious intentions that could harm the security of the region, the problem could be detected and prevented from developing further. Of course, this arrangement requires a willingness to cooperate closely on the part of the military establishments, including intelligence organizations, of each member nation.

—Secondly, close cooperation among the member nations of a regional security arrangement would deter aggressive actions from outside Powers. Even if an outside Power had superior military force and advanced high-tech weapons, the strength of the united regional association would force it to cancel any offensive against the region.

—Thirdly, there would be a possibility for close coordination of armament production and purchases from outside the region. The member nations would retain their sovereignty and be free to decide for themselves, but, with close coordination and a rational approach to achieve the best condition for every member nation, it could be expected that the decisions made by every Government would be compatible with the general interest of the region. Perhaps even production could be rationalized to prevent overlap and to ensure standardization. That would also benefit the economy of every member nation. The coordination of imports would prevent foreign manufacturers

and Governments from playing a dominant role and would, at the same time, prevent excessive buying by a member nation, which could become a destabilizing factor in the region.

Of course, this concept of regional security arrangement presupposes the willingness of every nation in the region to establish security cooperation. That would not be possible in regions where member nations are suspicious of each other and are not willing to improve their relationships. Conditions in the Middle East today, where Israel and the Arab nations look upon each other as enemies, and where even among the Arabs themselves there is no unity, would make such an arrangement impossible. The situation in South Asia, too, where people cannot overcome their traditional antagonism, would obstruct mutual understanding, which is the main factor in achieving mutual confidence and close cooperation. South-East Asia with the Association of South-East Asian Nations (ASEAN) as its core seems to be one of the regions mature enough to enter this type of arrangement.

The Conference on Security and Co-operation in Europe (CSCE), the security arrangement among European nations, is a good starting-point for making Europe a more peaceful part of the world. Since both the United States and the Soviet Union are members of that arrangement, it can guard against threatening behaviour by any European nation. Since Europe and North America play such an important part in the world community, the CSCE experiment can be used as a model by other regions.

Within a regional security arrangement, cooperation in disarmament and in arms control could take place more effectively. The prohibition of biological and chemical weapons could be implemented. The proliferation of nuclear arms could be prevented and the quality and quantity of these arms could be limited. Also the size of military

forces and categories of conventional armament could be regulated so that they would provide enough defence and security but would not pose a threat to the environment.

However, to achieve all these arrangements every member nation should have a democratic system. The decision to implement a certain political system is, of course, the sovereign right of each member nation. But the association would also have the right to safeguard the region from the negative consequences of an authoritarian regime in a country within the region. Using peaceful means, like economic pressures and the dissemination of information through the electronic media, the association and its members could influence healthy political developments in the region. The shift towards democracy in Eastern Europe, which was influenced from the outside, is a very good case in point.

At the global level, the United Nations must demonstrate its capacity to play an important role in managing international relations and preventing wars. The main body for decision-making is the Security Council, supported by other bodies in the United Nations organization.

But the United Nations has first of all to undergo a structural change in the membership of the Security Council. It is no longer realistic to have the permanent members of the Security Council be the five nations that were victorious at the end of the Second World War. Almost half a century has passed since then, and the world has undergone many dramatic changes. Of course, nations like the United States, the Soviet Union and China have worldwide influence. France and the United Kingdom, however, are today, and will continue to be, just ordinary members of the European Community. On a global scale, they are definitely no more influential than Japan and India. Since each permanent member has veto power and is therefore

able to exert its opinion very decisively on a global level, the permanent structure can no longer be considered valid for the world of today and of the future.

The new structure of the Security Council should better represent actual realities in present world politics. In addition to the attention being paid to Japan and Germany, which are growing in importance in the global political arena, attention should also be paid to some nations which wield significant influence at the regional level.

The changes after the end of the cold war have been fortunate for the United Nations, since now the United States and the Soviet Union are generally cooperating and no longer "out-veto" each other in every important decision. We are therefore interested that this situation continue. That means that we look for further developments in the Soviet Union that will guarantee the continuation of the democratic process.

The disarmament process must be enhanced by decisions at the level of the United Nations. More important, though, are the arms control talks and agreements between the United States and the Soviet Union on strategic arms reductions, on the liquidation of their chemical weapons, and on other aspects of disarmament. It can be expected that the role of the United Nations in disarmament matters will be enhanced after the two super-Powers have reached and implemented agreements on their conventional and non-conventional forces.

A stronger United Nations will be able to influence the security situation at the regional level. That is especially important for regions where nations have many difficulties in shaking off old prejudices and are not able to behave in a constructive way with their neighbours. The use of political and economic pressures will probably be helpful in changing these kinds of situations.

Regional cooperation and decisions made at the

United Nations level will allow for better regulation of arms manufacturing and transfers than in the past. It should no longer be possible for advanced industrial nations to exploit poor developing nations by selling them expensive high-tech weapons on a large scale. In the future the Security Council should impose economic and other sanctions on any nation that engages in such practices.

The United Nations must have the capability to act and use sanctions, including the use of force, against nations that do not want to comply with its regulations and decisions. It is therefore important that the Security Council be able to formulate decisions backed by all or by the majority of its members, and that it not be paralysed by the veto when facing serious violations of its decisions by any nation.

Until today the use of force by the United Nations has been exercised mainly by the military forces of the United States. That was the case in the Korean War in the 1950s as well as in the recent conflict in the Persian Gulf area. Because an act by the United Nations is a collective act of its Members, no impression should be created that a United Nations sanction is predominantly a United States enterprise. The other Members, including the Soviet Union, must participate equally in the execution of sanctions. That will require changes in the constitution of some important Members like Japan, whose constitution forbids the use of military forces as a means to solve international problems. That was why Japan did not send any of its forces to participate in the Iraq-Kuwait conflict.

The necessity for allied military action to enforce sanctions would also require that the United Nations be able to conduct military operations in an effective manner. The establishment of a skeleton military staff which would be available to the Security Council should be considered. The international staff would also conduct regular map

exercises in which general staff officers of Member States would participate in order to familiarize themselves with basic strategic and tactical concepts and thus facilitate any allied military operation that might be undertaken. The military staff could, at the same time, direct the United Nations peace-keeping forces operating in trouble spots like the Middle East.

The combination of national resilience, regional security cooperation and a more distinct role for the United Nations, especially the Security Council, in solving international problems should be the right framework for a future global security structure. To make it a reality, every nation, especially the large States, must be willing to participate.

Confidence- and Security-building Measures: Their Applicability Outside of European Contexts

Implications of the Regional Environment for Regimes of Confidence- and Security-building for Asia and the Pacific

Mohamed Jawhar

This article will focus on the prevailing environment for confidence- and security-building measures (CSBMs) in Asia and the Pacific, the potential of and possibilities for these CSBMs and obstacles to achieving them.

In this article, "confidence-building measures" (CBMs) will refer to the enhancing of confidence about military intentions. "Security-building measures" will refer to the enhancing of military security between the parties involved. "Confidence- and security-building measures" will, therefore, be a combination of both, essentially per-

The articles in this chapter are based on papers presented at the United Nations regional seminar on confidence-building held at Vienna, Austria, 25-27 February 1991. These and other papers presented at that seminar will appear in a forthcoming United Nations sales publication in the *Topical Papers* series. Consult the "Other Recent United Nations Publications on Disarmament" section in the 1992:1 issue of *Disarmament*.

Mohamed Jawhar is Deputy Director-General, Institute of Strategic and International Studies (ISIS) Malaysia, Kuala Lumpur, Malaysia.

taining to the military field. That is what is understood in the conventional, technical sense. The concept underlying the Conference on Security and Co-operation in Europe (CSCE) is, of course, broader than confidence- or security-building measures essentially in the military sphere. Security-building measures can be much more than that. They may encompass military, security, political, economic, cultural, social, human rights and environmental measures—at the least. Hence, we may be examining the application of CSBMs in the Asia-Pacific region while, at the same time, we are talking about the application of the CSCE to Asia and the Pacific. Given the present stage of development of this region, it would appear much more profitable to talk, not about the CSCE-type of military-related CSBMs, but rather about the broader CSCE concept of confidence-building and cooperation, which applies to all spheres. This is because the potential for confidence-building and security-building measures in the military field *per se* seems rather limited in the Asian and Pacific environments. So this article will look beyond CBMs and CSBMs.

Environment and Parameters for Asia-Pacific CSBMs

First, when we consider CSBMs and a CSCE-type of arrangement in Asia and the Pacific, we are talking about a very vast area, stretching from the Middle East or western Asia and the Persian Gulf to East Asia and the Pacific, including Australia and New Zealand and the islands of the South Pacific Ocean. Europe, by comparison, is rather small—and we have to be very clear about the sheer expanse of the area we are talking about.

Secondly, the geographical, historical, political, cultural and social heterogeneity of the area has to be taken into account. There is, of course, heterogeneity in Europe,

but there is much more homogeneity than exists in Asia. Indeed, in Asia and the Pacific there is no common identity or consciousness except, in practical terms, in a very basic and minimal sense. Instead, the best we can argue for in Asia and the Pacific is subregional consciousness or identity. For the many countries in this region which emerged from colonialism only after the Second World War, not only is there very little sense of regionalism—and any that exists is very nascent and embryonic—but there is more nationalism than anything else. There is nothing comparable to the ongoing process of European regional integration in Asia and the Pacific in any pan-Asian sense.

Instead, subregional organizations have been established. I am, of course, referring to several in the Middle East and the Persian Gulf, to SAARC—the South Asian Association for Regional Co-operation—in South Asia, to ASEAN—the Association of South-East Asian Nations—in South-East Asia, and to the South Pacific Forum—in the South Pacific islands subregion. These arrangements of course have an impact on prospects for CSBMs in the area and its respective subregions and for any CSCE-type of organization in the area. There are no shared historical or security perceptions for the area as a whole, and this would rather limit any prospect for any application of CSCE concepts across the whole region. The best one could hope for, for the near term and foreseeable future, if CSCE-type regimes are wanted in the area, would be subregional schemes. Several other factors indicate the same limitation, and will be addressed later.

One should also consider the multiplicity of balances of power or separate theatres that the region contains in contrast to the very clear bipolar power configuration of post-war Europe, at least until recently. In Asia, there is, or was, the super-Power balance and even today it exists in the North-East Asian subregion. It was superimposed,

however, upon a number of local balances of power—in the Middle East, in South Asia, in South-East Asia, in the South Pacific and even in North-East Asia. So we have had overlapping, multiple conglomerations of power balances in the region, unlike in Europe. This factor will of course heavily influence regimes of the CSCE type throughout the area.

On a related point, there are great asymmetries of power across this vast region, which further complicate CSBM and arms reduction efforts, whether these are on a region-wide, subregional or even bilateral basis. These asymmetries are of two types: between nations as a whole, and between the different characteristics of their military power, including whether it is land-based, air-based or naval, and whether it is conventional or nuclear. There are, of course, the super-Powers, the United States and the USSR, which stand apart, at least in the nuclear sense. Then there are the major Powers of the region, and I refer here to China, Japan and India. Thirdly, there are what could be called middle Powers: Indonesia, the Koreas, Pakistan and Viet Nam. Finally, there are the lesser Powers, some of the weakest and smallest in the world. Thus some of the most powerful and some of the weakest countries in the world are represented in Asia and the Pacific. In view of these asymmetries of power, there is little room for reciprocity and little perception of shared benefits from certain forms of CSBMs in the area. How, for instance, are arms reductions handled between large Powers and much lesser Powers? The larger Powers will in any case be left with a preponderance of military might over the smaller ones. And this particular aspect will have a crucial impact on any multilateral, particularly region-wide, CSBMs in the area.

Thirdly, the strategic environment in the Asia-Pacific region ought to be addressed. It has become more

fluid and dynamic during the past two years. This is of course true for many other parts of the world as well. Certainly we are not sure where we are heading in terms of the strategic scenario in the region. It is uncertain whether it will become unipolar, with the United States dominating everything, or whether it might be bipolar, at least in certain subregions of Asia and, particularly, North-East Asia, or multipolar. In many parts of Asia and the Pacific the strategic scene is going to become predominantly multipolar. Among the strategic changes that have just taken place during the last two years, I would refer specifically to the Soviet reductions and pull-back, the reduction in the United States role and the presence and increasing emergence of regional Powers in the area. These developments may have both positive and negative effects on the climate for CSBMs.

Fourthly, despite an all-round improvement in relations between the countries in the area, particularly in South-East Asia and East Asia, in South Asia serious problems remain unresolved and, with regard to Japan and the Soviet Union, there is the problem of the Kurile Islands. Elsewhere in the subregion there have been dramatic improvements in inter-State relations and also improvements in relations between the regional States and the two super-Powers.

While there is of course *détente* between the USSR and the United States, there is also *rapprochement* between the major Powers: the United States and China, the Soviet Union, China and the Republic of Korea, and Japan and the Democratic People's Republic of Korea. China and Viet Nam have improved relations and, also in South-East Asia, China has renewed diplomatic relations with Indonesia and established diplomatic relations with Singapore. Relations are also improving among the Indo-Chinese countries, particularly between Viet Nam and the

ASEAN countries. These developments, again, have had a mixed impact: on the one hand, they reflect a relaxation of tensions in many parts of Asia which will be conducive to at least certain forms of CSBMs. On the other, they have been accompanied by an increase in nervousness and a sense of insecurity in some countries and also by concerns about a rise in intraregional tensions which have hitherto been suppressed as a result of perceived common threats or problems.

In the case of the ASEAN countries, for instance, the Cambodian question was a unifying factor, which gave birth to numerous regional cooperative ventures, but, as the Cambodian problem recedes, the intraregional tensions among the ASEAN countries themselves may rise to the fore. This will surely have implications for CSBMs in the subregion—however, not necessarily negative ones. It could provide an impetus for more CSBM measures, and in fact that is what seems to be happening among the ASEAN countries.

A fifth point is that, unlike in Europe, where the situation soon stabilized after the war, in Asia there have been innumerable post-war conflicts and multiple centres of conflict, just as there has been a multiplicity of power centres. The levels of this conflict and tension have varied widely, covering a whole range from hot wars to internal conflicts to intense or moderate bilateral confrontations and tensions. The existence of hot wars and an intense degree of confrontation, in certain cases, make the climate unfavourable for a CSCE-type accommodation in Asia and the Pacific. But this does not preclude the potential for certain similar CSBMs in areas where conflict is either reduced or very much under control.

A sixth point concerns the sustained or increasing arms expenditures aimed at maintaining or increasing military capabilities in many parts of Asia. There are a few

notable cases where either military expenditure is being reduced, or where selective, limited reductions in military capabilities, often unilateral, are being carried out. But the general trend, especially for smaller Powers with the financial wherewithal to increase their military capabilities, is one of increase. The highest levels of expenditures on arms next to Europe are found in this region, particularly in recent years.

Several factors drive this phenomenon. One is national ambition. There are countries which are newly rich or otherwise have the wherewithal and want to play a larger role in the region. Therefore they perceive themselves as needing the necessary military sinew to play that more dominant role. Another factor is that many countries in the region are starting from a very low military base and building it up. They have not yet attained what they consider for themselves to be reasonable sufficiency. And then there is of course modernization and replacement of equipment. Yet another factor has been the extension of exclusive economic zones (EEZs) at sea, which have vastly increased their areas and created a need for many countries to strengthen their navies.

There have also been modifications of military doctrines and strategies, from an emphasis on counter-insurgency to one on external defence capabilities. A number of countries in the region which traditionally concentrated upon internal disorder have now pacified their internal areas and are building up conventional force capabilities with an external orientation. There are of course the problems of perceived external threats, and, in some cases, they have been perceived as rising. Some countries are in fact worried about reductions in the United States role or even in the Soviet presence, and are fearful of some of the larger Powers in their areas. As a result of the cutting down of the United States presence there arises the need

for sharing the defence burden with the United States: for some countries this is leading to decisions to increase their expenditures. And, finally, there have arisen the factors of competition and of the arms race among countries in the region. All this will have to be taken into account in the negotiation of CSBMs in the relevant subregions.

A seventh point concerns the existence of many territorial disputes and some questions regarding the sovereignty and legitimacy of regimes in the area. In some of the cases in point there is very little genuine inclination for peaceful resolution of the dispute, or the environment is very volatile, such as in western Asia, and to a lesser extent in the Korean peninsula. Even in the latter case, the potential for conflict remains. The Kurile Islands question, sovereignty questions between China and Taiwan, province of China, territorial disputes and claims in South-East Asia, particularly between the Lao People's Democratic Republic, Cambodia and Thailand, and the conflicting claims of six littoral States in the Spratly Islands dispute in the South China Sea are additional, volatile situations. The Kashmir and the Sino-Soviet border areas should of course also be mentioned. All of this contrasts with the much more settled situation in Europe.

My eighth point concerns the Pacific islands, where the situation is different from that in mainland Asia. There the main security concerns are nuclear-weapon testing and the environment. In the case of some of the South Pacific islands, the natural environment is a matter of very real concern. With global warming, it has been put forward that some of them, which just have their noses above the current sea level, could find themselves below sea level in a relatively short time.

Finally—my last point—we must bear in mind when we consider CSBMs for Asia and the Pacific the limited technology and resources available for the operation of

certain kinds of CSBMs in the region. I refer particularly to communications for verification. This deficiency may be overcome to some extent by assistance from international organizations, such as the United Nations, or from more advanced nations. Nevertheless it could be a very strong constraint and it has already governed some kinds of CSBM measures in the region.

Characteristics and Potential of Asia-Pacific CSBMs

All these diverse factors mentioned might give the impression that the environment for CSBMs in the Asia-Pacific region is very unfavourable. This is not necessarily so. There are constraints, definitely, but there are also possibilities for confidence-building, security-building and confidence- and security-building measures in the region.

First, although CSBMs are sometimes spoken of as something new for Asia and the Pacific, various kinds have actually been applied in Asia, but not of the CSCE type. They have been localized, bilateral, or subregional, and there are many examples of them in the Middle East, in South-East Asia and in Indo-China. Then there are ASEAN, SAARC, the South Pacific Forum, proposals for a zone of peace, freedom and neutrality and a nuclear-weapon-free zone and, finally, the United Nations effort for peace in Cambodia. These include initiatives as well as systems already in place. Some of them of course are more significant in declaratory terms than in actual implementation. But CSBMs are not a new phenomenon in the region, and this should be stressed, although none is equivalent to those under the CSCE.

While legal or institutional regimes are often stressed, it should be pointed out that a feature of CSBMs in Asia is that they tend to be less institutionalized and less

formal systems, as reflected, for instance, in some of the measures worked out between China and the Soviet Union.

Thirdly, we should forget about a pan-Asian CSCE-type conference. The sooner this is realized, the better. Given the factors mentioned, it does not appear to be a possibility for the region. We should strive instead for subregional approaches and bilateral CSBM regimes, which would be more in tune with the prevailing situation in the region. We should also, as noted earlier, seek comprehensive security measures rather than military ones, as sometimes there is greater need to focus on political, economic, social and other forms of non-military cooperation than on military CSBM arrangements as such. This approach will provide the greater potential for the reduction of tensions and conflict in the area, and eventually it could lead to military CSBMs as well.

Fourthly, given the nature and problems of the area, CSBM measures would best be modest, incremental and not very detailed or advanced "high-tech" types. The process could in fact start with very basic activities, such as consultation, dialogue and communication among the military in certain areas.

The potential exists for new CSBMs or comprehensive security and cooperation types of arrangements in Asia. Again, these should be on a lesser, subregional scale.

One subregion to be considered is South-East Asia. As we know, in ASEAN we have a CSBM regime which was introduced in 1967. The purpose behind ASEAN, although there are economic and cultural aspects, was actually security: to enhance confidence and reduce conflicts and tensions between countries which were previously adversarial, or whose relationships were marred by conflict.

For most of the past decade, Cambodia has divided South-East Asia, but now Cambodia is a less divisive factor,

and trends towards South-East Asian reconciliation, particularly between Viet Nam and the ASEAN countries and Laos, have started. We should take advantage of this by looking into confidence-building measures, if not security-building measures, even at this early stage. In fact there is already the Treaty of Amity and Co-operation in South-East Asia of 1976, whose signatories are the ASEAN countries and Papua New Guinea. A first objective could to secure the accession of Viet Nam and Laos to that Treaty. It is actually a very comprehensive Treaty, in some ways like CSCE, without the stress on transparency and arms control.

Another new initiative—in keeping with the recommendation to stop talking about a CSCE for Asia as a whole—would be to begin with one for the Asia-Pacific region, that is, in the sense of the Pacific rim of Asia. It could be called, for instance, a "conference on security and co-operation in the Asia-Pacific". It would be less institutionalized than CSCE, particularly its military aspect, and, unlike the CSCE, it should and would not supplant or undermine smaller subregional CSBM regimes in the area, such as ASEAN or SAARC. It should also be noted that, unlike Europe, the Asia-Pacific region—in the sense of its Pacific rim—comprises large expanses of water. Therefore, CSBM measures in this area will have to focus also on the naval elements. And in this context one of the areas for attention would be the South China Sea, particularly the Spratly Islands, where the ongoing disputes have potential for armed conflict.

The Relevance of Confidence- and Security-building Measures for Africa

Abdu Kinana

We are holding this seminar when tension and rivalry between the two super-Powers, the Soviet Union and the United States, has been reduced to a great extent. The division of Europe into two blocs has ended, and once again Germany is one. Most important in this situation are the efforts by the two super-Powers and their allies genuinely to reduce their arms build-up. The improvement of relations between the United States and the USSR has resulted also in their mutual efforts towards finding political solutions to regional conflicts in the third world. In this regard, we commend the United Nations, which has also made substantial contributions to talks and agreements on peace and disarmament. The participation by all of its Member States in the efforts to create a peaceful world constitutes recognition by the world body that we all have a collective responsibility. All nations large or small, developed or developing, armed or unarmed, have a moral obligation to ensure the maintenance of international peace and security.

Abdu Kinana is the Deputy Minister for Foreign Affairs and International Co-operation, Dar-es-Salaam, United Republic of Tanzania.

African Countries' Needs for Confidence-building

Let me say at the outset that when considering confidence- and security-building measures, one must remember that the experience of the South is different from that of the North. What is relevant in Europe will not necessarily be applicable to Africa. We have had a different experience. We suffered for many years under colonialism. We inherited insecure and controversial boundaries. We are ending the political liberation of our continent and are now embarking on its economic liberation.

Hence, certain measures which apply in Europe may be difficult to implement in Africa. For example, in Africa, where border problems and ethnic conflicts continue, it is very difficult to exchange information on military forces and on plans for the deployment of weapons. While it is possible to have military contacts and exchanges of units, prior notification of military activities is only practicable among countries with good political relations.

Countries must develop mechanisms to put an end to threats against others. Confidence-building measures concern the removal of threats by one country to the peace and security of another. It is not my wish to go into the polemics of which comes first, disarmament or confidence-building measures. But we cannot deny that a certain measure of confidence and trust has to exist among nations for them to disarm or even to reduce their defence budgets. To the developing world, the latter is most relevant and urgent.

Needs and Efforts to Reduce Military Spending

Many developing countries spend a great portion of their national budgets on defence. And most countries will give the same reason for increases in their arms purchases

and military build-up, that is, the existence of a threat to their security. But the accumulation of weapons by one country is in itself a threat to another. It is this policy of building an impressive military force in order to try, through the threat or indiscriminate use of force, to solve the complex problem of peace that has committed humankind to arms build-ups and thereby created serious threats to peace.

Military expenditures in developing countries, calculated at 1979 constant prices, amounted to $33 billion in 1972. Ten years later, in 1981, they had already reached the figure of some $81 billion, that is two and a half times more. Today—in 1991—it is believed that the figure is over $150 billion. These countries' share of total military expenditure has more than trebled in the last twenty years and now accounts for over 26 per cent of the world total. This is not a healthy situation.

The arms trade constitutes a considerable burden on the weak economies of the developing countries. It is a most sterile, unproductive and unequal exchange for those countries. The arms trade deprives the importing country of resources that could be used for productive activities. Arms import expenditures do not generate increased consumption or increased production, or even future production, to pay for their costs, nor do they promote public health, education or water and housing. Arms imports worsen the balance of payments deficits of the developing countries. As a whole, arms imports account for almost 50 per cent of the current account deficits in most of the developing countries. Is it fair for us to spend so much and call it defence or national security and leave our citizens to die of hunger, disease and malnutrition and to remain illiterate? I think it is time that we in the developing countries, and especially in Africa, looked seriously into this matter.

Our countries have the moral obligation to design and to agree upon measures that will eradicate any kind of threat by one country or ethnic grouping against another. I shall here use, as a positive example, the region from which I come. In East Africa, meetings to promote good neighbourliness, held between leaders and officials at all levels, have gone a long way towards the path of confidence- and security-building measures. Problems are discussed and forecast, and channels of communication are established for dealing with border and other related problems. Good neighbourliness, which is one of the foreign policy pillars of Tanzania, has contributed a great deal towards ensuring peace and security along our borders and with all our neighbours. The establishment of border commissions with our neighbouring countries has eradicated the possibility of the development of any tension. Such efforts should in the end remove the need to keep troops on the borders of neighbouring countries. This will influence policies towards the reduction in size of the armies in the region, which in turn will result in the release of funds from defence to the social welfare of our people.

In another regional grouping the member countries of the Southern African Development Co-ordination Conference (SADCC) have come together to liberate their economies from dependence on South Africa. SADCC is a reaction against the South African racism which is the root cause of instability and conflict in the region. South Africa has had a policy of aggression against independent neighbouring States. This is manifested in various kinds of incursions, border violations and support of the bandits to which Angola, Mozambique, Zambia, Botswana, Lesotho and Swaziland are constantly exposed. This situation has forced these neighbouring countries to increase their arms purchases and military build-ups. The front-line States have a regular strategic consultative meeting of their min-

isters of defence and security. Taking note of the fact that some positive changes have taken place in South Africa, the countries in the region should now subscribe to a different conceptualization of how peace should be won and how regional relations should be structured following the consolidation of a democratic, non-racial and united South Africa. Therefore, with the dismantling of apartheid, the countries of the region should be able to chart a common strategy on confidence-building measures and on security and, finally, to start reducing their military expenditures.

Needs for Cooperative Confidence- and Security-building

For Africa, then, the future lies in regional cooperation; for within their own organizations, intra-African problems can be discussed, solutions found, and interests harmonized. This will lead to reduction of tension and the reduction of military expenditures, and in turn to non-military sectors of the economy being given bigger shares of national GNPs. Subsequently, such a process must lead to peace and stability.

The prevalence of inter-State and intra-State conflicts in various parts of Africa is a compelling reason for the application of appropriate confidence-building measures as a means of containing or resolving such conflicts. Many African States have experienced various forms of intermittent and protracted civil wars. In contrast with the situation in Europe, however, there are no competing and ideologically antagonistic military alliances in Africa. The need for the introduction of permanent military-related confidence-building measures is therefore less compelling than that for measures aimed at the overall improvement of inter-State relations in the political, social

and economic spheres, and hence at the alleviation of intra-State conflicts.

Since the ultimate goal of confidence-building is to create favourable conditions to enhance disarmament, peace and security in the world, enhancement of regional confidence should be a part of a global endeavour. However, the reality of international politics shows that the easing of tension in one region of the world may, sometimes and in some cases, create insecurity in other parts of the world, or even complicate the process of confidence-building elsewhere. For example, the relative easing of tension in Europe has not led to any greater sense of security in the developing countries.

The overriding security concern in the world today is the arms race, especially the nuclear arms race and the risk of nuclear war. There is a growing apprehension in many countries outside of Europe and North America about nuclear weapons, as the number of ships, submarines and bomber aircraft equipped with such weapons in the world's oceans and skies continues to increase and the arms race goes on. The global projection of power by the super-Powers necessitates the establishment of bases and staging facilities in various regions of the world. The military presence of extraregional Powers introduces a delicate security equation in those regions, which may upset regional balances of power and lead to new fears and mistrust among the neighbouring States.

Appropriate confidence-building measures in the security and military-related fields have to evolve from concrete situations in each State and each region as a whole. Africa's security concerns are primarily related to intra-State and inter-State conflicts. As noted, some of the most serious security preoccupations in Africa since independence have been conflicts within, rather than among, States. The Nigerian civil war, the incessant war in Chad

and the long-standing armed conflicts in Angola and the Sudan, Ethiopia, Somalia, Liberia and Mozambique are among the many conflicts that have entailed military operations whose impact has been felt by neighbouring States. In many cases, domestic conflicts and prolonged unrest may have a spill-over effect and adverse impact on neighbouring States. The most common domestic sources of inter-State conflicts have been lack of national cohesion and clear State boundaries, development problems and, in some cases, authoritarianism and political instability. The ongoing peace talks in the pertinent African countries provide another contribution towards building confidence among their peoples.

The African countries themselves will have to address these and other related problems if peace and security are to prevail, although some of these problems have been externally imposed on those facing conflict or experiencing other problems. But, in the majority of our countries, there is room for solutions and compromises. Only the necessary courage is needed for them to face their realities and avoid civil strife and suffering of the innocent, and to bring the refugee problem to an end.

Countries of the southern hemisphere and, especially, of Africa, need to open up and democratize their systems. Governments must be accountable to the people. We must respect human rights, allow freedom of the press, and apply the rule of law. If Governments respect their peoples, and if it is the will of the people which is supreme, then it is possible for them to develop healthy relations with their neighbours.

Summing Up: The Need for Elimination of Threats

Finally, let me again repeat what I said earlier. Peace is not only the absence of war, but it is basically the absence

of any threat: any threat to one ethnic group by another, any threat to one religion by another, any threat to one nation or State by another. Each group must take certain measures to assure the peace and security of another group. One country must work hard to be able to enjoy the confidence of another country, and especially that of a neighbouring country.

*
* *

The creation and consolidation among nations of peace and stability, in this case through confidence- and security-building measures, is not an easy task, but efforts are bearing fruit. We must not give up, for we all have a responsibility, and that responsibility is to make the world a safe and a happy place for mankind.

The Nature of Confidence-building in the Latin American Environment

Hugo Palma

The subject of confidence-building in Latin America and the Caribbean focuses on the question of how the implementation of confidence-building measures (CBMs) may serve the interests of the region.

Without any intention of going into an elaborate academic discussion, I would like to say that basically there are two views with regard to confidence-building.

In the northern hemisphere with its accumulation of arsenals of all types and a fierce East-West confrontation prevailing until very recently, the idea of promoting confidence has been generally related to concrete steps oriented towards the avoidance of an armed conflict. Confidence, in this strict sense, means confidence that no specific threat will materialize, for instance, a surprise attack; it is therefore linked to military and military-security aspects.

As to the other view, the idea of confidence not only relates to its military aspects, but may encompass a wider spectrum of security concerns that could be relevant in a specific situation. In this case, the perception of threat may

Hugo Palma was Vice-Minister for Foreign Affairs, Ministry of Foreign Affairs of Peru, when this paper was presented; he has since been appointed Ambassador of Peru to France.

derive not exclusively from a concrete possibility, such as the surprise attack already mentioned, but also from more general elements such as policies that may be detrimental to confidence. These would include, for instance, a policy of interference or domination or a menace that does not necessarily originate in a neighbouring country. This is known as confidence in the larger sense.

In the case of Latin America, the question of confidence is understood in the larger sense. This is an inherent feature of the historical and social character of the countries of the region as well as of their perception of the nature of their intra-regional relations.

Evolution of the Latin American Security Experience

The regional actors' belief in their intrinsic identity goes back to the beginning of their independence. In the Treaty of Perpetual Union, League and Confederation, subscribed to under the influence of Simon Bolivar in Panama in 1826, provisions were made not only for economic integration and political consultation, but also for the organization of common military institutions, both army and navy.

A good part of the nineteenth century witnessed a very substantive political disintegration and a number of conflicts, mainly of a territorial character, throughout the region. By the beginning of this century, the political map of Latin America had been drawn, but the countries and the ideal of unity were severely weakened. Not surprisingly, this was also the beginning of the period of pan-Americanism as a political force behind the growth of the United States. Ideologically, the new significance of that country was already present in the Monroe Doctrine and in the idea of the pursuit of its "manifest destiny".

With the conclusion of the Second World War and

the beginning of the cold war, Latin American countries were encompassed in the world-wide security situation established by the super-Powers. The Inter-American Treaty of Reciprocal Assistance (TIAR) of 1947 formalized our adherence to the strategic system of world confrontation.

With the passing of time, however, a form of strategic independence began to prevail in the views and deeds of a number of the countries of the region. This was coincidental with an increased presence of the military in politics, and, as a consequence, accompanied by substantial increases in terms of numbers of troops, military expenditures, and diversification and modernization in the procurement of weapons in Latin American countries.

Also in Latin America strategic concerns are not precisely defined, are often vaguely presented and poorly understood, and are not necessarily shared by the public or even by politicians. This translates into the implementation of defensive systems that only the military seems to understand and support. As a result, there has been no clear social and political understanding of who the enemy may be, or of how the defence should be prepared.

With regard to security matters, it should be noted that, at the same time, in the western hemisphere and specifically in Latin America, over the years a complex system for peaceful resolution of conflicts has been established. There are a substantial number of arbitration agreements that have entered into force among many countries of the region. In the past three decades, wide-ranging integration processes have been organized at both the regional and subregional levels. Also, a number of joint development projects have taken shape. Slowly, the concept that Latin American regional security could not be a by-product of United States security was being acknowledged. At this point in time it is clear to decision makers

that there is a strategic differentiation between the United States and Latin America.

Finally—and for some years now—the possibility of defining the elements of common or shared security on a Latin American regional or subregional basis has attracted interest in academic and political quarters. The concept of regional common security may be returning to its source, as reflected in the thinking of Bolivar. Hopefully, this may occur without the rhetoric that for many years served essentially to dissimulate Latin American inability to act in unison.

It should similarly be taken into account that Latin America is not alien to matters of arms control and disarmament. The Treaty of Tlatelolco of 1967 was a pioneer in establishing a nuclear-weapon-free zone in a populated area of the world, since the earlier agreements establishing zones, the Antarctic Treaty and the sea-bed Treaty, pertain to unpopulated environments. It is evident that a tremendous responsibility rests upon Governments and peoples in the region to see that the Treaty of Tlatelolco is duly adhered to. There could be no more serious situation in the region than one arising from a violation of the letter or the spirit of the Treaty. Also, the Ayacucho Declaration of 1974 was followed by formal negotiations among the Andean countries to limit their armaments. More recently, the conflict situation in Central America called for the confidence-building and disarmament measures that were eventually agreed upon in the Contadora Act and the Esquipulas agreements.

There have aiso been a number of political declarations which underline an increasing openness in the area of security concerns. Among the more substantive ones which should be noted are the Acapulco and Galapagos Declarations. In the former, the idea of common regional security was presented at the heads-of-State level of the

Mechanism of Political Consultation and Concerted Political Action (Rio Group), together with the call for increased cooperation against drug-trafficking and terrorism. In the latter, possible orientations for confidence-building measures and joint border commissions were set out by the presidents of the Andean Group of countries.

It is clear, then, that there is a specific and manifest Latin American interest in matters of security, and perhaps also that slowly but steadily this concern is attracting academic and political attention and being translated into concrete decisions that are bound to have significant influence in regional affairs.

Present and Future Regional Confidence-building

A consideration of undeniable importance is the fact that Latin America and the Caribbean, which cover a vast expanse with a variety of political and strategic problems, may not be very suitable for a single or region-wide project for the enhancement of their security. In this respect, it would be wise to take a more restricted geographical approach and select subregions which could be more amenable to the task of promoting confidence than the region as a whole. Very briefly, it may be said that the Caribbean and Central America present a quite complicated strategic situation in which there is significant influence from extraregional Powers. The case of South America is more manageable for a number of reasons, including its almost insular configuration and the possibility of establishing a zone of peace in the area. In any case, the continent certainly looks like the more promising subregion for confidence- and security-building measures.

As to the specifics of building confidence in the region, it should be noted that measures of the Helsinki type, concerning manoeuvres or military movements,

relevant as they might be for Latin America, are not likely to be of paramount importance. This is due to the fact that the strategic situation—despite the existence of a number of elements with a potential for conflict—does not centre around the notion of surprise attack nor is it overly dependent on any concentration of military forces. There are places where the military presence is very thin, such as along the Brazilian-Peruvian border—which stretches for thousands of kilometres with only token military posts.

Nevertheless, CBMs, including some related to military or military-security matters, have been established and consistently applied in the region. Among the more frequently commented upon are the programmes of medical assistance by the navies of Brazil and Peru, Colombia and Brazil, and Colombia and Peru in their border area; the surveillance operations conducted by Argentina, Brazil and Uruguay in the South Atlantic; various types of participation by foreign officers in training courses in a number of countries; and the talks on CBMs by Peruvian and Chilean military authorities. Two other elements may be of interest: first, the CBMs approved by Argentina and the United Kingdom for activities in the Malvinas area; and, second, those mentioned in the Central American peace process, specifically, the Contadora Act and the Esquipulas Agreement mentioned earlier.

Additionally, it could be said that there are a number of CBMs currently being applied in various situations without their being given that name. Activities and understandings for the avoidance of incidents or their handling, courtesy visits and practices, institutional contacts for different purposes, including sports, health care and other matters, all seem to occur more frequently than is generally thought. Latin America can thus demonstrate practices germane to confidence-building even in the strict sense.

But this does not preclude the possibility that many

other CBMs, belonging either to the military-security realm or to the wider political context, could be negotiated and agreed upon. The latter are clearly favoured, almost as a vision for the strengthening of peaceful relations among Latin American countries. These CBMs or, perhaps more accurately, measures and policies for the promotion of confidence, could encompass several areas, and some may be categorized as follows.

Military

Some potential measures in the military field lie in these sub-categories:

1 Information: the exchange of publications, including programmes of studies; agreements on pre-notification of manoeuvres and military movements; and invitations to observers;

2 Training: exchanges of students in military schools; special courses open to foreign students for certain subjects, such as military participation in civilian activities (road construction, disaster relief, etc.); courses for military officers on arms control and disarmament and the economy of defence; participation in activities such as search and rescue;

3 Contact: increased military visits and delegations; military contacts in border areas; procedures for the avoidance of incidents and for their handling; procedures for consultations with various purposes, including the limitation of some types of armaments; direct lines of communication among military authorities; joint exercises and manoeuvres; other contacts for institutional purposes, such as health and sports;

4 Institutionalization: regional military conferences of South American authorities for the consideration of additional CBMs, various other aspects of security and other issues.

Political

Consultation at different levels could be held on a number of matters of common interest, such as:

—External debt;

—Integration and other forms of cooperation;

—Meetings of parliamentarians for the identification of ways of restraining arms expenditures, for the promotion of peace and for the reiteration of the principle of peaceful solution of disputes;

—Identification by political leaders of the elements of strategic differentiation and common security for the region and the establishment of policies of "defensive defence";

—Mechanisms for the curbing of drug trafficking and subversion and for joint action in the case of natural disasters;

—Prioritization of development projects that are of interest to more than one country, particularly in border areas;

—The possibility of the limitation and integration of military industries;

—Incorporation into political programmes of precise definitions of strategic concerns, defence postures and the like.

Diplomatic

Measures sponsored at the diplomatic level should include:

—Courses on arms limitation and disarmament at training institutions;

—International seminars on relevant issues;

—Establishment of sections at foreign ministries that would specialize in disarmament matters and would be open to visits by diplomats of other countries;

— Political seminars on strategy.

Academic

Academic studies on the economy of defence, arms limitation and peace research; on the relationship between disarmament and development (or the arms race and underdevelopment); and on the question of military expenditures and external indebtedness could all promote the building of confidence.

Civic

Civic activities are those involving non-governmental organizations, churches, the media and other opinion makers. They could include seminars and other mechanisms for the orientation of public opinion on matters pertinent to the confidence-building problem and on ways of promoting interest in the maintenance of peace at lower levels of military forces, equipment and expenditure.

* * *

It is essential to take into account at this time that there are not only momentous changes taking place at the political and strategic levels worldwide—as proven by events in Europe, the Middle East and other areas—but also in the nature of threats, at least for a number of countries, including some in Latin America.

For instance, at this juncture the most serious challenges to Latin American sovereignty and independence are certainly not found in the threat of armed conflict with a neighbouring country, but mainly from the new and urgent danger to national viability reflected in such problems as governability, subversion, drug trafficking, extreme poverty and environmental decay. All these elements constitute menaces to national security that were perhaps not foreseeable in the past but now command such immediate action that no delay in dealing with them can pass without dire consequences.

All this requires that Latin America make renewed efforts to promote confidence among countries in the region. Such improved confidence would not only be instrumental for the preservation of peace and strengthening of security, but also for providing the region as a whole with the capacity to deal more effectively with the problems of the hour.

Destruction of Weapons Systems under Multilateral Arms Control Agreements

Stephen J. Ledogar

Introduction

Generally, the multilateral arms control agreements negotiated prior to the late 1980s were designed to provide confidence that certain types of *activities* would not take place. Agreements such as the partial test-ban Treaty, the nuclear non-proliferation Treaty and the agreement of the Stockholm Conference on Confidence- and Security-building Measures and Disarmament in Europe (CDE) are good examples. These agreements, however, have not required the *destruction of existing weapons*. (The biological weapons Convention is an exception.)

More recently, however, reduction of existing levels of armaments has become a central feature of multilateral arms control efforts. Consequently, physical destruction of armaments has become an important issue in major multilateral negotiations. Two such negotiations provide good examples of the problems that arise when destruction is a central element of a treaty agreement: the ongoing chemical weapons negotiations in the Conference on Disarmament in Geneva, and the negotiation on conventional

This article is based on a paper presented at the United Nations Conference on Disarmament Issues held at Kyoto, Japan, 27-30 May 1991. A compilation of all the papers of the Conference will appear in a forthcoming United Nations sales publication in the *Topical Papers* series.

Stephen J. Ledogar is the United States representative to the Conference on Disarmament in Geneva, Switzerland.

armed forces in Europe, which concluded in November 1990.

The purpose of this paper is to review the approach taken to destruction of weapons in these two major multilateral negotiations. Recent bilateral arms control agreements such as the United States-USSR Treaty on their intermediate-range nuclear forces, which entered into force in 1988, also call for the destruction of existing weapons, but, because of the focus of this Conference and the need to keep this analysis to manageable proportions, this paper focuses on multilateral negotiations. Particular attention will be given to the environmental aspects of weapons destruction.

Destruction of Chemical Weapons

Destruction of existing chemical weapons has long been agreed to be one of the key requirements of a global chemical weapons ban. Thus, the multilateral chemical weapons convention being sought in the Conference on Disarmament negotiations will require the destruction of all existing chemical weapons, whether they are part of a current military stockpile or are relics of past wars. Tens of thousands of tons of nerve gas, mustard gas and other chemical warfare agents must be destroyed, along with the munitions and other containers in which they are stored.

The draft convention under negotiation contains detailed provisions on destruction, including the schedule for destruction and arrangements for verification. It specifies that chemical weapons must be destroyed in an irreversible manner that is safe both for people and the environment. Individual States are allowed to determine which specific destruction method will be used, except that, for environmental reasons, it is prohibited to dump chemical weapons in any body of water, to bury them on land, or to burn them in open pits. Destruction shall take place only at specifically

designated and appropriately designed and equipped facilities. Confidence that the weapons have been destroyed will be provided through continuous on-site presence of international inspectors during destruction operations.

It is foreseen that chemical weapons will be destroyed during the first 10 years of the convention, beginning one year after entry into force. The approach to destruction is designed to take into account the interest of parties in undiminished security during the destruction period, to enhance confidence-building in the early part of the destruction stage, to encourage gradual acquisition of experience in the course of destroying chemical weapons, and to be applicable irrespective of the actual composition of the stockpiles and the methods chosen for the destruction of the chemical weapons. Given the likely divergence in stockpile sizes, the schedule of destruction is based on the principle of levelling out. Generally speaking, each possessor must destroy one ninth of its stocks annually.

The United States and the Soviet Union have agreed, however, to destroy their stocks more rapidly than required under the draft multilateral convention. Under the bilateral Agreement signed in June 1990 by President Bush and President Gorbachev, the two sides will begin to destroy their stocks to the common level of 500 agent tons by the eighth year of the multilateral convention, substantially lower than the level calculated under the general formula in the multilateral convention.

While the most extensive destruction requirements will fall on the United States and the Soviet Union, a number of other countries will be obligated to carry out destruction activities. Some of these countries possess chemical weapons stockpiles, although they have not yet acknowledged this officially. Others have quantities of

chemical weapons on their territory that were abandoned by foreign forces during the World War II era.

The United States has had an active programme for destruction of chemical weapons for many years. The number one priority in this programme is safety and environmental protection.

The original guidelines for the United States programme date back to a study in 1969 by the National Academy of Sciences, which assumed that all chemical agents and munitions would eventually require disposal. The Academy called for a more environmentally sound method of disposal than ocean dumping, which was the primary method used in the 1960s. It recommended that techniques similar to those used by the United States Atomic Energy Commission for disposing of radioactive wastes be adopted to ensure maximum public safety and protection of the environment. The Academy endorsed the incineration method for mustard and chemical neutralization for nerve agents, but recommended further study to determine optimal methods.

Over the last two decades the United States safely destroyed approximately 170,000 munitions and nearly 8,000 metric tons of chemical agent, principally by industrial-scale operations. The first operations on an industrial scale were conducted at Rocky Mountain Arsenal outside Denver, Colorado, during the period 1970 through 1976. Over 2,700 metric tons of mustard in ton containers were incinerated, and over 3,700 metric tons of nerve agent sarin in ton containers and various warheads were destroyed by chemical neutralization.

Since 1979 the United States has been operating a test facility, the Chemical Agent Munitions Disposal System (CAMDS), at Tooele, Utah. The purpose of CAMDS is to evaluate the equipment, processes and procedures which are being considered for use at future disposal

facilities to determine their safety and ability to meet environmental standards.

Based on our previous disposal experience and successful tests at CAMDS, in 1984 the United States formally adopted direct incineration as the preferred destruction method for all of its chemical stocks. This determination was endorsed by the National Research Council, a body of the National Academy of Sciences. Destruction through direct incineration requires less time for completion, is non-reversible, and generates much less residue than chemical neutralization.

The current United States Chemical Stockpile Disposal Program consists of two operating facilities—CAMDS and the Johnston Atoll Chemical Agent Disposal System (JACADS). The baseline technology developed in the pilot-scale facility at CAMDS is essentially the same process we have incorporated at JACADS in an integrated facility.

Johnston Atoll, which is the site of our first full-scale destruction facility, is located 717 nautical miles southwest of Honolulu, Hawaii. The purpose of JACADS is safely to destroy the lethal chemical weapons located on Johnston Island. Rocket destruction has been under way since July 1990. As of 1 April 1991, JACADS had destroyed over 7,500 sarin-filled M-55 rockets and incinerated over 35,000 kilograms of agent. Later, munitions containing the nerve agent VX or mustard will be destroyed.

Safety considerations have been paramount in the design, construction and operation of the JACADS facility. Already it has demonstrated the capability to meet very stringent criteria for protection of plant workers and the general population. The agent safety standards were established by the United States Surgeon General to provide maximum protection. In addition to these agent standards, there are general pollutant emission standards for all of the

facilities to determine their safety and ability to meet environmental standards.

Based on our previous disposal experience and successful tests at CAMDS, in 1984 the United States formally adopted direct incineration as the preferred destruction method for all of its chemical stocks. This determination was endorsed by the National Research Council, a body of the National Academy of Sciences. Destruction through direct incineration requires less time for completion, is non-reversible, and generates much less residue than chemical neutralization.

The current United States Chemical Stockpile Disposal Program consists of two operating facilities – CAMDS and the Johnston Atoll Chemical Agent Disposal System (JACADS). The baseline technology developed in the pilot-scale facility at CAMDS is essentially the same process we have incorporated at JACADS in an integrated facility.

Johnston Atoll, which is the site of our first full-scale destruction facility, is located 717 nautical miles southwest of Honolulu, Hawaii. The purpose of JACADS is safely to destroy the lethal chemical weapons located on Johnston Island. Rocket destruction has been under way since July 1990. As of 1 April 1991, JACADS had destroyed over 7,500 sarin-filled M-55 rockets and incinerated over 35,000 kilograms of agent. Later, munitions containing the nerve agent VX or mustard will be destroyed.

Safety considerations have been paramount in the design, construction and operation of the JACADS facility. Already it has demonstrated the capability to meet very stringent criteria for protection of plant workers and the general population. The agent safety standards were established by the United States Surgeon General to provide maximum protection. In addition to these agent standards, there are general pollutant emission standards for all of the

has assured countries in the region that the Johnston Island facility will not be used for such purposes. Another idea has been that conversion of a chemical warfare agent to a less toxic chemical could be considered as destruction, or at least as the "beginning" of destruction. This is also not acceptable to us. Conversion of a chemical warfare agent to another chemical that can, without great difficulty, be used again for chemical weapon agent production does not eliminate the threat.

Still another idea, suggested as an interim measure to be applied if States have difficulties in beginning destruction, is to disable munitions pending their destruction. This idea also has serious flaws. It can too easily become a substitute for destruction. As a practical matter, disabling millions of munitions in a way that would not complicate eventual destruction operations would be technically complex, dangerous, and expensive. It would be much better to focus resources on getting actual destruction under way.

Experience in the United States and elsewhere has also demonstrated that political problems associated with destruction can be just as daunting as the technical problems. These problems, of course, reflect concerns about safety and protection of the environment. Implementation of the convention's provisions on destruction depends on successfully assuaging these concerns. While each country must deal with the concerns according to its own circumstances, our experience suggests that openness, extensive local involvement and making safety the highest priority are essential.

There seems to be increasing interest in the Conference on Disarmament in discussing how safety and protection of the environment can be ensured during the implementation of the destruction provisions of the multilateral convention. The United States welcomes this

development and is prepared to contribute actively to such discussions.

Unfortunately, only the United States and the Soviet Union have openly admitted their possession of chemical weapons. The lack of candour on the part of other States with chemical weapons is not only a concern in itself, but also a hindrance to serious multilateral discussion of safety and environmental protection.

In summary, the United States attaches the greatest importance to ensuring that destruction of chemical weapons is accomplished in a manner that is safe for people and for the environment. In implementing the provisions of the multilateral convention, this fundamental principle must be given the highest priority. International cooperation can play an important role towards that end.

Elimination of Conventional Armaments

Our second example of a treaty involving the destruction of armaments with safety and environmental implications is the recently completed Treaty on Conventional Armed Forces in Europe (CFE).

In the CFE negotiation, the West proposed, in May 1989, that all armaments in excess of any agreed levels be destroyed. During the ensuing negotiation, the goal that equipment must be destroyed to meet the agreed limits was maintained; however, a cursory examination of the CFE Treaty text reveals that several other methods of accounting for equipment reductions were included in the document. As in any negotiation, many specialized and specific issues were uncovered that did not fit with the overall theme of reduction by destruction. In the CFE negotiation, as in any arms control negotiation, the approach taken to equipment reduction had to be tailored during the negotiating process to adjust the specifics of the proposal to the circumstances that apply for each participant. Within

a multilateral negotiation, the tailoring and adjusting process is extremely difficult to accomplish.

Equipment Reduction Consideration in CFE

The CFE negotiation faced some special circumstances that limited the options as to what could be considered as an acceptable outcome for the issue of equipment reduction. For the West, the primary factors of concern were:

1 Europe contained (and still contains) the highest concentration of armaments in the world. Without some means of limiting arms transfers as a result of an arms reduction agreement, the armament floodgates of Europe could have opened, thus setting off a global arms race which could have destabilized regional balances of power in many areas;

2 It was understood that a successful CFE negotiation would likely undercut the public consensus for defence spending among the democratic countries in Europe. A CFE Treaty that allowed equipment to be moved out of Europe to the East, with the possibility of bringing it back into Europe at some later date, could create a potentially dangerous security situation;

3 The West did not want to fix the military balance in Europe at the expense of worsening the military balance in Asia through the movement of equipment out of the Atlantic-to-the-Urals area;

4 It was uncertain how long the window of opportunity would be open to negotiate and execute a conventional arms reduction agreement for Europe. Therefore, it was in the Western interest to be able to execute rapidly any arms reduction agreement before the military or the political situation changed.

For the West, these four factors created a set of implied limits on what type of agreement could be negotiated in the CFE forum. Any outcome to the negotia-

tion had to limit the ability of the participants to sell or shift treaty-limited equipment out of the area, to ensure that the armament reductions occurred rapidly before Western countries had trimmed their defence spending a disproportionate amount, and to ensure that the agreed weapons systems limited by the treaty were, in fact, eliminated permanently.

For the East, a different set of factors were apparently at work—factors that often led to Eastern positions that fuelled Western concerns:

1 The East, with significantly higher equipment holdings in many categories, was looking at a massive work requirement to reduce its military equipment levels. This level of effort argued against trying to reduce armament levels too quickly;

2 The Soviet Union apparently had had some difficulty executing the unilateral force reductions that President Gorbachev announced at the United Nations in December 1988. This difficulty argued for a more lengthy draw-down period for CFE implementation;

3 The East had an equipment reduction process developed that it wanted to follow. While this process was slow, the East claimed that it represented an efficient means for gradually processing armaments into scrap metal for consumption by its steel industry. As a result, the East resisted proposals by the West to adopt destruction methods designed to eliminate the military capability of armaments rapidly, without necessarily contributing to the process of preparing that equipment for consumption as scrap metal by the steel industry;

4 The Soviet Union was apparently concerned about the political ramifications of simply destroying massive amounts of military equipment that its population had sacrificed so much for in terms of depressed living standards. It indicated a strong desire to convert some military

equipment into items that could be used in the national economy.

The proposals made by both sides each supported their own objectives and naturally raised suspicions on each side that some ulterior motive might be behind the other's proposals. This conflict in objectives made the equipment reduction issue difficult to negotiate. The outcome of this can be seen in the CFE Treaty. In essence, the Western proposals for equipment destruction procedures dominate the destruction processes, while Eastern proposals provided much of the basis for the conversion procedures, use of equipment as targets, and accounting for losses by accident.

CFE Destruction Procedures

Within CFE, there are a number of different procedures that have been approved for use in destroying military equipment: severing, explosive demolition, deformation and smashing. Conversion is also authorized, but limited. Some equipment to be eliminated can be accounted for in limited amounts by disposition as targets used in training, as museum or static display pieces, or through destruction in accidents.

The CFE Treaty based its destruction requirements on the concept of requiring destruction of only those elements of the item that are critical for system operation and that are difficult to repair. The standard of measurement was to inflict sufficient damage so that it would be about as expensive and time-consuming to repair the item of equipment as it would be to build a new item. For the most part, each method of destruction or conversion was aimed at damaging the same parts to prevent reconstruction of a system by mixing and matching parts from different equipment pieces.

For tanks, the key components judged to be impor-

tant for destruction were the turret, the trunnion system (point where the main gun attaches to the turret), the breech system, the gun tube, and the hull. To destroy the hull, without taking the time to cut it into pieces completely, requires that the areas around the drive shaft opening (between the engine and the drive sprocket) be cut away. In addition, the turret aperture area and glacis plate (front armour) are also points where damage significantly degrades the military potential of the hull. In general, the hull should be attacked with the aim of weakening key stress areas or of warping the alignment of its track-system attachment points. All parts not specifically cited for destruction may be salvaged for reuse by the owning country.

Armoured combat vehicles (ACVs) are to be destroyed using the same general approach as that specified for tanks. The hull and turret/main gun (if so equipped) are the focal points for destruction.

Artillery, particularly self-propelled artillery, is also treated similarly to the tank-destruction specifications. For towed artillery, the upper carriage, particularly the trunnion mounts, are vulnerable areas that allow maximum damage to be inflicted with minimal effort.

For aircraft and helicopters, destruction of the main fuselage should be the primary objective of any destruction regime. For fixed-wing aircraft, the most vulnerable areas to focus the destruction effort upon are the area where the wing attaches to the fuselage and the area just in front of the cockpit. For helicopters, the primary stress of lifting the airframe is carried by the critical load path that ties the airframe to the main transmission, which is at the base of the rotor mast. The fuselage should be destroyed in such a way as to destroy and twist the critical lifting structural members in the fuselage. Again, components other than

those specified for destruction are recoverable by the owning country.

The severing, or cutting, method of destruction is likely to be the most common method of destruction used to meet the CPE Treaty requirement. While this method is the most labour-intensive way of destroying equipment, it is based on widely available technology and usually contributes to the ultimate goal of reducing the item of equipment to pieces small enough to be melted at a steel mill (1 metre x 1 metre x 1.5 metres, or smaller).

For example, it usually requires 300 to 500 man-hours of labour to completely cut a tank into pieces that can be melted. Since steel is worth about $130 a ton (on the east coast of the United States), and a tank's metal content will weigh about 25 to 40 tons (model dependent), the metal-salvage value of a typical tank might average $4000. Whether a country has to pay any additional funds above the salvage value to have tanks eliminated depends on the labour costs in that country, any transportation fees, and the amount of materials used to prepare the metal for the mill. (Labour costs are usually the biggest factor.)

Explosive demolition is a fast and inexpensive method for eliminating armoured vehicles. For example, a tank can be destroyed with about two man-hours of labour and less than $100 worth of explosives. Unfortunately, this method does not help solve the problem of disposing of the residual metal; however, it does provide a method for ensuring that each State can meet its reduction time-schedule in the event that an unexpected problem, such as a work interruption, delays the destruction effort.

The deformation method is essentially a crushing operation; a hydraulic press is used, or an object may even be run over with a heavy tracked vehicle. The damage that must be done with this method is specified in terms of a

percentage of deformation from the original shape of the item.

The smashing method is based on a system that was developed in Poland to break up heavy steel plates for scrap metal. Essentially, the procedure uses an eight-ton wrecking ball dropped repeatedly from a height of 22 metres onto an object that is placed on a special anvil. Using this method, it takes about 30 to 40 hits of the ball to break a tank into pieces small enough to be melted. In many ways, this option might prove to be the most efficient and environmentally sound method available for destroying tanks.

Conversion is an attempt to modify military equipment into equipment with a non-combat application. While there are applications where this method is warranted, such as using tanks as fire-fighting vehicles for use in nuclear disasters, the expense of operating converted military equipment, coupled with repair parts availability issues, seems to limit the feasibility of eliminating military equipment on a large scale by this method. In addition, there is always the suspicion, whether warranted or not, that the converted equipment provides a means of avoiding the intent of the arms control treaty.

In the CFE Treaty, for ground equipment, the turret and gun-system components on equipment to be converted must still be destroyed. In addition, the hull being converted must have key pieces of armament removed to decrease its utility as a combat vehicle. For helicopters and trainer aircraft, conversion involves the removal of all wiring and fire control components necessary for using the aircraft in advanced combat operations.

Environmental Considerations

As noted earlier, the destruction of chemcial weapons involves serious environmental and safety con-

cerns. The various destruction options for eliminating conventional armaments under the CPE pose some environmental problems, problems that are within more easily manageable limits. For all methods of destruction, the various fluids used in the equipment to be destroyed must be drained and should be kept segregated. With regard to a tank, for example, it would not be uncommon to have it arrive at a destruction site with 350 to 700 litres of fluids on board. If these fluids are mixed when drained, they have to be treated as toxic waste in many countries. In addition, if these fluids are not drained and the explosive demolition method of destruction is used, it is possible that the equipment will be set on fire and will produce large volumes of hazardous smoke.

The severing method of destruction is the one other area that produces some environmental hazards. Armoured equipment is usually composed of alloy metals which produce toxic fumes when vaporized. Large-scale cutting operations can produce significant amounts of air pollution. In many countries, there are requirements for hoods and air scrubbers to be used during high-volume cutting operations that use some type of torch to melt metal.

Factors for Other Regional Negotiations

While the CFE Treaty provides one example of how conventional armaments can be destroyed, it should not be viewed as the only acceptable way to approach the problem. As noted earlier, the CFE processes of destruction were developed on the basis of some special considerations that might not be issues in conventional arms negotiations in other areas of the world. In determining how armaments should be eliminated under future arms control agreements, the following considerations recommend themselves:

1 How fast must the armaments be reduced? As a practical matter, it is easier politically to develop a build-down reduction regime which allows the participating countries to shave a percentage of their holdings each year or two. For example, if country X owns 1000 tanks, and agrees to cut 100 tanks over a six-year period, that country could eliminate 16 or 17 of its oldest tanks each year and reach the new limit without much of the political pain that reductions during a shorter time-span might impose. If this approach is not acceptable, then other more drastic measures must be applied.

2 Are the amounts of armaments involved so large that their sale would cause problems in regional or global armament balances? If the amount is minor and the sale would just constitute a part of the continuing cycle of arms redistribution that occurs annually, it might be easier to allow the weapons to be sold, with an eye towards having fewer to sell in the future as armament inventories shrink. This is especially true where the countries involved are having economic difficulties and arms destruction would cause major political problems. (The large inventory of armaments in Europe made this an unacceptable solution for CFE.)

3 Can the countries use the spare parts from the items being eliminated? If so, a destruction regime that allows extensive salvaging of parts might be more acceptable. Most parties would likely realize some economic benefit from repair-parts cost savings.

Conclusion

As arms control agreements increasingly call for physical destruction of armaments, questions such as the magnitude of the destruction task, the desired order and rate of destruction, the costs, and the impact on political, economic and environmental concerns come into interac-

tive play. It would seem that the key to a successful armament reduction regime is taking the time to develop a detailed plan that makes as much political and economic sense as possible.

Experience to date with unilateral and internationally negotiated destruction of weapons suggests that proper destruction of chemical weapons is enormously costly, both absolutely and relative to the original cost of the weapons. Destruction of conventional weapons is much less costly and can conceivably finance itself through the value of the scrap and other salvage. The bulk of the difficulties and costs destruction of chemical weapons are caused by safety and environmental demands. Environmental questions are much more easily managed in destruction of conventional weapons. There is no relevant experience to date on destruction of nuclear weapons.

Aspects of the Central American Peace Process

Development as an Instrument in the Central American Peace Process

Homero L. Hernández Sánchez

In considering the Central American peace process it is imperative to refer to the various interrelated internal and external factors involved in the regional situation. One cannot forget that the world in which we live grows increasingly more interdependent with every passing day.

It would thus be misleading to suggest that Central America can achieve a stable and lasting peace by tackling any one of its problems on an individual basis. This might lead to the erroneous impression that the problems faced by Central America as a whole, or by any country in the region individually, are temporary. Or it might suggest that there is a set of problems which, though permanent, have nevertheless become exacerbated or have taken a turn for the worse. That is, they are passing through a critical phase. This too is far from the actual facts.

In reality, there are two crises that have converged in Central America, one structural and the other related to current economic conditions.

The structural crisis is one of poverty and injustice;

Homero L. Hernández Sánchez is a career diplomat and currently serves as Advisor for Political Affairs, Permanent Mission of the Dominican Republic to the United Nations in New York.

it is a long-standing crisis. We might say that it is an everyday affair, a crisis that we have grown accustomed to seeing and accepting even though it touches our deepest feelings in an almost familiar way. It is a permanent crisis for a number of economies that, for the most part, have been based on single-crop agriculture and are, as a result, affected by dependency and external vulnerability—economies that are, moreover, profoundly marked by the realities of depressed and inadequate domestic markets, by little capacity to save, by open or disguised unemployment, and by a low level of innovation.

It is the crisis of a society built on manifestly unjust foundations and characterized by an extremely unequal and arbitrary distribution of wealth that dooms the great bulk of the population to backwardness. It is a crisis that is reflected in the growing pauperization of the rural masses who live in squalor and in the frightening and uncontrollable swelling of the ranks of the have-nots in urban areas. This so-called "critical poverty" is evidenced by such inhuman rigours as poor nutrition, chronic or endemic diseases, high infant mortality, illiteracy and an extreme measure of institutionalized social injustice that is virtually legitimized.

The other crisis is linked to current economic conditions. It has of late been superimposed upon the earlier crisis, heightening some of the effects of the latter and making them more unbearable and more painful. It involves the burden of the external debt, the loss of the international purchasing power of exports, the contraction of external financial earnings, the chronic balance-of-payments deficit, the shortage of capital and consequent decline in economic output and rising unemployment. Above all, the current crisis is characterized by the inevitable adverse impact of the war situation with which the peoples of the region have had to cope, together with the usual

phenomena of wartime economies: the disappearance or reduction of the active members of the workforce, the tidal wave of refugees spilling over the borders into other countries and the migration of agricultural workers to urban centres. In point of fact what has happened in Central America is the result of a most unfortunate combination of the worst possible consequences of the two crises.

It is therefore essential to distinguish the current economic crisis from the structural crisis. The reason for that lies in the fact that solutions which may address the current economic crisis do not entail by any means solutions to the permanent problems. Difficulties may be alleviated or may even disappear without there being even the slightest change in either the causes or symptoms of the structural crisis. Proposed solutions to the current economic crisis may do nothing to improve the prospects for self-reliant, integrated and sustained growth, which is the only realistic and genuine solution to the worse and more serious of the two crises, the long-term crisis.

To think that Central America's problem or crisis began some two or three decades ago with the emergence of liberation fronts in Nicaragua or El Salvador or with the armed conflict between Honduras and El Salvador (the inappropriately named "Football War") is to set out from a false premise. Considering the history of the region or, more precisely, the historical context within which its economic structure was shaped is helpful in understanding the Central American reality.

The region has traditionally been a source of raw materials for the major outside centres of power. The former colonies, identified as they were with the exploitation and production of the traditional basic commodities, have built their industrial capacity on foundations that were bound to erode their wealth. The problem is further

aggravated by the existence of political systems based either on dictatorships or military Governments in disguise, or on democracies imposed in the context of economic dependency. An outmoded and decaying structure is the distinctive feature of the economic and political model which has been imposed upon the peoples of Central America and which, with the connivance of part of the political class and economic power centres, represents the pattern of subjection common to the whole of Latin America.

Thus, in considering the requirements and the objective of a peace process in Central America, I take exception to the theory that democracy, in and of itself, is the means for furthering equitable development and promoting peace.

Though since the days of Plato, Socrates and Aristotle, no better alternative to democracy as a political system has been discovered, democracy must not be limited to a mere change in government every now and then, which can at times be pointless. For democracy to flourish, it must be a political system that empowers the people to rid themselves of all the injustices to which they have been subjected. If democracy is to survive, it must take root, and in order for it to take root, the people must feel that they are part of the democratic process. To be able to exercise their legitimate rights people must have a certain educational and economic level—the higher the development level, the more solid dem racy will be.

Without wishing to review the familiar chronology of the peace process in Central America, I would like to recall that the first serious attempt at peace-making in Central America began with the meeting of the Ministers for Foreign Affairs of Colombia, Mexico, Panama and Venezuela on Contadora Island, Panama, in 1983. Their aim was to join forces to seek Latin American solutions to

a Latin American problem, namely, the establishment of peace in Central America. The "Contadora Group" was subsequently joined by representatives of Argentina, Brazil, Peru and Uruguay, called the "Contadora Support Group". As a result of problems affecting democratic stability in Panama, that country's membership has been in abeyance.

Recently, as a result of the return of the South American countries to the democratic fold and their increased interest in working together to seek Latin American solutions to the region's problems, the Group's membership was expanded with the entry of the Governments of Bolivia, Chile and Ecuador and representatives of one Central American and one Caribbean country. The Group has acquired the new name of "Group of 13" or "Rio Group" since the new members joined it in Rio de Janeiro.

The "Contadora Group" was the basis, a historical milestone we might say, for a new stage in the history of the Central American region. It represents a real step forward towards the affirmation of specific fundamental values and principles on the basis of which the region could, and should, foster its ability to innovate and devise unprecedented responses that are in keeping with actual conditions, and develop to the fullest its capacity to grow.

The importance of the "Contadora Group" lies in the fact that it recognizes that the roots and deep-seated causes of the instability and the permanent state of conflict in the region can be traced primarily to underdevelopment, backwardness, injustice and economic vulnerability. The "philosophy" of the Group is based on the assumption that, if security and peace are to be lasting and stable, they must be placed in a context that is closely linked to the social and economic development of the peoples of the region. The Contadora process culminated in the Declarations of

Esquipulas I and II, adopted respectively in May 1986 and August 1987.

Without minimizing the value of any such initiatives, at both the bilateral and multilateral levels, it is nevertheless relevant to single out the objectives embodied in the Security Commission Agreement under Esquipulas II, which were defined as follows:

> "To ensure that the armed forces of the countries of the region are of such a nature as to defend sovereignty . . . and internal order rather than of an offensive nature;
>
> "To establish a reasonable balance . . . or a proportional and overall equivalence between their weapons, equipment and human strengths, in such a way that they do not represent any threat to neighbouring countries;
>
> "To define a new model for security relations between the Central American countries, based on co-operation, co-ordination, communication and prevention;
>
> "To secure commitments with respect to the foreign military presence in the region."[1]

and the declaration issued by the meeting of Central American Presidents in Guatemala in June 1990, to the effect that:

> ". . .Violence is beginning to be a part of a past which we shall not forget but which we must not repeat, and we are now embarking upon other paths.
>
> "Accordingly, we have understood the people's cry and we have affirmed that we do not want any more war and violence; instead we wish to see the same kind of energy devoted to the best interests of the development of the Central American people."[2]

Both documents reflect in a clear and explicit manner the desires of the region both to reduce the existing

military establishment and to utilize the resources that are squandered on unnecessary armies to meet the urgent development needs of the Central American people.

It would be dishonest today to talk about development without taking into account the question of military spending. The developing countries spend nearly four times as much on arms as they do on health, while 20 per cent of the children in developing countries die before they reach the age of five years. Arms-purchasing abroad by the underdeveloped countries increased during the 1970s, rising to the highest levels in the 1980s. During the second half of the 1970s and the first half of the 1980s, when the external debt in the third world countries was growing uncontrollably, arms imports accounted for about 40 per cent of new debt incurred during that period.

In Latin America too, the problem of the external debt, which is the chief obstacle to the development of the peoples of the third world, is closely linked to excessive military spending. A surplus international liquidity, particularly in the 1970s, gave rise to an irresponsible lending policy which propelled the underdeveloped countries, caught in their own economic development crisis, into borrowing.

Similarly, in the most advanced countries, the upward spiral of military spending had much to do with the growth of debt as a result of rising interest rates. For instance, in the most highly industrialized country, excessive military spending was a major factor in the sudden increase in the budget deficit. The deficit led to an unprecedented rise in interest rates which, in turn, affected the debt. The country which traditionally was a source of capital for the rest of the world became one of the main importers of capital, pursuing a rigid monetary policy that kept interest rates at exceptionally high levels and turned

financial institutions into active promoters of loans to other countries.

As the credit dried up without warning, payment of the debt was demanded. Today, international lending centres, in order to preserve their own financial system, continue to call for structural changes and sweeping domestic policy reforms in the debtor countries. This situation has become a time-bomb with potential unimaginable consequences for industrialized and third world countries alike, posing a constant and serious threat to democracy and peace.

The arms race in Central America was a phenomenon that defied reason. It is inconceivable that peoples with similar cultural roots, peoples who are equally poor and possess few resources, should consider themselves to be potential enemies and, for the sake of interests alien to their peoples, should embark upon an arms race that has been detrimental to their own social and economic well-being.

If one takes Nicaragua as an example from the region—a country whose wartime economy was imposed by external and internal factors—one finds that in 1985 its military expenditures represented more than 26 per cent of the central Government's total expenditure. In El Salvador, the smallest country in the region, owing to similar factors, military spending in 1987 accounted for more than 35 per cent of the national budget. In Costa Rica, on the other hand, a country that has been free of armed conflict, military spending has never exceeded three per cent of the national budget. It is no coincidence that the standard of living enjoyed by Costa Ricans is higher than that of any of the other peoples in the region.

Three decades ago, the United Nations endorsed the objective of general and complete disarmament. Because there are those who believe that international oversight by

outside forces for the purpose of enforcing general and complete disarmament would mean abandoning national sovereignty, the objective has been generally viewed as Utopian. And yet the right course would be the maintenance of complete transparency and greater political will on the part of all Governments.

The Central American countries have recently demonstrated that they are committed, if not to immediate complete disarmament, at least to a drastic reduction in their military establishments. Nicaragua is a case in point. Nevertheless, although unilateral regional demilitarization is a major factor for peace in Central America, it would be illusory to think that, by taking that step alone, the region would put the terrible memory of the past behind it.

In addition to substantial arms reductions, progress must be made in the international sphere towards ending the constant threat of intervention in the region—a threat that can no longer be artificially portrayed as a result of East-West confrontation now that the so-called cold war has supposedly ended. Furthermore, the unequal relations of the existing unjust international and domestic economic order must be eliminated. Otherwise, the peoples of Central America will continue to be plagued by illiteracy, poor health, poor sanitation and poverty, and they will continue to agitate violently for an order that will give them a more just existence.

The Central American people continue to face challenges on several fronts simultaneously: the subordination—whether open or disguised—of the civilian order to the military, with inappropriate and excessive expenditure on arms; the threatening trends of the world order; and the vulnerability of national economic systems. These are all obstacles to the consolidation of democracy, social justice and freedom as the highest expressions of their aspirations.

While it is clear that Central America is a region

characterized by diversity as evidenced by different national realities, there are nevertheless more factors that unite the Central American countries than factors that set them apart in their economic and political relations with the rest of the world.

While each individual country of the region must, on the basis of its own national experience, generate the plans and carry out the pressing reforms that are needed to respond to these challenges, the coming together of this group of countries, united by similar problems and a common historical tradition, is a key factor in increasing the options open to each individual nation. The present generation in Central America is certainly facing challenges which cannot be met by thinking in national terms, but which call, rather, for thinking regionally. Policies which reflect an awareness of these realities and people capable of carrying them out must be found if this generation is not to fail its destiny.

What the entire region needs is change in every sphere, on every front and in every stratum of society.

There is a need for substantial change in the outlook of the leaders of the region, so that they may prepare themselves to manage social change with justice and without violence.

Change is needed among the business community, which must realize that it ought to pay for output in terms of productivity, greater efficiency and increased exports, and that the opportunity for change in the social sphere must be created.

There is a need for change in the armed forces, which must finally understand that their role as the vanguard of the most important values of the nation is to join, with their organization and immense potential, in the national development effort.

Change is also needed among the working classes

and the peasants, to whom fate has once again clearly assigned the role of the driving force for transformation—a change that allows them to realize that their interests, rather than being at odds with those of the military or the intellectuals, are in fact at the core of their nation's well-being.

Only in this way will we banish the spectre of war, of interventions, or of hunger and poverty which give rise to violence; and only in this way will we no longer have to see Central American children burying in trenches their toys and their dreams.

Notes

1 A/44/970-S/21504, annex. The Security Commission agreement was signed at San José, Costa Rica, on 31 July 1990.

2 A/44/958, annex. The Antigua Declaration was signed at Antigua, Guatemala, on 17 June 1990.

Aspects of the Central
American Peace Process

Regional Peacemaking and Disarmament in Central America

Boris Yopo and Victor Millán

Introduction

Since the nineteenth century, the history of Central America has been one of civil conflicts, local wars and foreign intervention. In the 1980s, global strategic interests transformed a local conflict into a stage for super-Power confrontation, triggering a growing militarization of the region that gradually closed off avenues for initiatives aimed at a negotiated settlement of the differences fuelling the conflict.

In this situation, regional Powers such as Mexico and Venezuela, whose geographical proximity gave them close ties to the Central American area, decided in 1983 to get together to form the Contadora Group to help work out a regional security agreement that would prevent all-out war in Central America or United States military intervention in El Salvador or Nicaragua. Later, in 1985, four Southern Cone countries joined this mechanism to form the Contadora Support Group.[1]

From the start, the Contadora Group and the Sup-

Boris Yopo is Deputy Director of the Programme to Monitor Latin American Foreign Policy (PROSPEL), Santiago, Chile.

Victor Millán is Associate Researcher at PROSPEL and former researcher at the Stockholm International Peace Research Institute (SIPRI), Stockholm, Sweden.

port Group received wide support from the European Economic Community and Canada and from international organizations. However, by late 1987 the Central American region was totally debilitated and had reached a military and political stalemate. On the one hand, several years of "low intensity warfare" had not produced a decisive military outcome in any of the confrontations between Governments and insurgent groups, with the result that these conflicts threatened to continue indefinitely, at a growing cost to Central American societies. On the other, the Contadora Group and the Support Group had failed to persuade the countries involved in the conflict to sign the revised Contadora Act as a culmination of the negotiations begun in 1983, because the United States Government and some local allies of the United States were opposed to the involvement of the Contadora and Support Groups in the regional crisis. Contadora's achievements were thus limited to preventing the war from becoming regional in scope and to laying the groundwork for a new peace process, this time promoted by the Central American Governments themselves.

Esquipulas II

On 7 August 1987 at Guatemala City, the Presidents of Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua signed the "Procedures for the establishment of a firm and lasting peace in Central America", also known as the Esquipulas II peace plan.[2] The negotiations which led to the conclusion of the Esquipulas agreements had really begun a year earlier, at a meeting in Guatemala of the Central American Presidents, known as Esquipulas I. Not much progress was made at that meeting because of major disagreements and also outside pressures on some of the Governments, but agreement was reached to set up and formalize a series of meetings of the Central American

Presidents and to promote the creation of a regional parliament, indicating a renewed collective readiness to tackle outstanding problems in order to arrive at a comprehensive settlement of the Central American conflict.

During this period, an agenda for Esquipulas II was put together that emphasized the need to achieve consensus agreements, reflecting the different perceptions and national interests at stake in each situation. The unifying theme of this regional peace process was national reconciliation, namely, dialogue and negotiation between Governments, political parties and insurgent groups aimed at putting an end to the civil war situations in Central America. Thus, unlike the Contadora peace plan, which gave priority to the external dimensions of security, the Esquipulas process emphasized agreements on domestic policy as a determining factor for progress towards the resolution of those conflicts and, thereafter, the gradual demilitarization of the entire area.

Each of the presidential summits held since 1987 has helped perfect the mechanisms permitting progress in the policy of national reconciliation. At the Alajuela (Costa Rica, 15-16 January 1988), Costa del Sol (El Salvador, 13-14 February 1989), Tela (Honduras, 5-7 August 1989) and San Isidro de Coronado (Costa Rica, 10-12 December 1989) meetings, the conflicting parties softened or changed their positions in order to facilitate the decision-making process. For instance, it was agreed that all parties concerned would have veto power at each stage of the negotiations. This made the parties more equal, limiting the impact which disproportionate power can have on the negotiating process.

As indicated above, Esquipulas II changed the course of the Central American conflict by introducing a linkage between the peace process and the domestic political reform process. The Central American Presidents grap-

pled with issues which would normally have been considered purely internal matters, such as: dialogues with the opposition, cease-fires, amnesty, international supervision of electoral processes, and respect for human rights. At the same time, numerous meetings were held to analyse the question of regional security, especially such matters as the capping of arms imports and the scaling-down of Central American armies.

Furthermore, the resolution of the conflict in Nicaragua through general elections in February 1990 created a perception that the main cause of the crisis had been removed and that the political dimension of the negotiations should now give way to the economic dimension. At the eighth summit meeting of the Central American Presidents, held at Montelimar (Nicaragua) in April 1990, tensions between the Nicaraguan Government and the Governments of Honduras and El Salvador were, for the first time, absent from the agenda. That meeting, in addition to adopting resolutions on disarming the contras, emphasized the need to pursue negotiations to resolve the domestic crisis in El Salvador.[3]

The recent changes of government, particularly the election of President Violeta Chamorro in Nicaragua and the departure of President Oscar Arias Sánchez in Costa Rica, have resulted in even greater political homogeneity among the Central American Governments. One consequence of this development is that the most recent Central American summits, in a clear gesture of support for the Government of El Salvador, have been increasingly categorical in their demands that the Frente Farabundo Martí para la Liberación Nacional (FMLN) agree to an unconditional cease-fire. This issue is an exception, however, to the fundamental concern of the Central American Presidents to focus almost exclusively on analysing economic problems, and in particular on reactivating

economic integration, a focus which led to the announcement, at the Antigua meeting in June 1990, of the launching of the Central American Economic Plan of Action (PAECA). At the end of the meeting, the Presidents of the region met with the United States Secretary of State, who proposed the establishment of a special forum to consider programmes of economic assistance.[4]

Disarmament and Reduction of Armies

The easing of regional tensions in 1990 allowed work to begin on one issue that had been postponed repeatedly since the Esquipulas II negotiations began, namely, security aspects. Thus it was that one of the key issues in this conflict since the days of the Contadora negotiations returned to the agenda: regional demilitarization on the basis of change (reduction) in the size and nature of armies, as part of efforts to achieve a reasonable balance of forces within the region.

The Esquipulas II process thus gave rise to the Central American Security Commission, made up of the Deputy Ministers of Defence and Deputy Foreign Ministers of the Central American countries, which has met regularly three times a year. Two positions emerged in the Commission's work: one favouring a sustained disarmament process that would leave armies with a strictly defensive capacity (advocated by the Government of Costa Rica, which has had no army since 1948, and Nicaragua, which in the final days of the Sandinist Government began a reduction of its Sandinist People's Army) and the other (advocated by the rest of the States in the region) opposing such a process. The High Commands of the Guatemalan and Salvadorian armies were particularly opposed to such a process and even claimed that the strength of their respective armed forces should be increased.[5]

At the 31 July 1990 meeting of the Security Commis-

sion, held at San José, Costa Rica, Nicaragua insisted on an immediate freeze on arms levels, the suspension of international military manoeuvres in the Central American region, and the signing of regional and bilateral treaties of friendship and non-aggression. In the end, the Nicaraguan proposal went nowhere because of the opposition of countries like Honduras, which maintain that the Commission's objectives do not include regional demilitarization and hold that it should instead pursue more limited goals such as mutual confidence-building and the regulation of arms imports.[6]

Table
Military balance in Central America[a]
(Troop strength 1977-1990)

	1977	1980	1985	1990[d]	Percentage growth 1977-1985	Percentage growth 1985-1990
Guatemala ..	14 300	14 900	31 700	43 300	122	37
Nicaragua ...	7 100	–[c]	52 800	63 500	644	20
Honduras ...	14 200	11 300	16 500	18 200	17	10
El Salvador ..	7 130	7 250	41 650	44 600	484	7
Costa Rica[b] .	5 000	5 000	8 000	7 800	60	–2.5

Source: *The Military Balance, 1977-1990*, IISS, London.

a For the period 1977-1990, no statistics are available on paramilitary or police forces (except in Costa Rica), whose numbers are considerable in the Central American countries. In the period 1977-1985, there was a marked acceleration in the growth of the armed forces in all five countries, coinciding with the increase in regional tensions.

b Paramilitary forces, according to *The Military Balance* for various years. Costa Rica has only a Civil Guard and Rural Guard.

c *The Military Balance, 1980-1981*, p.86, mentions the dissolution of Somoza's National Guard but has no figures on the military strength of FSLN.

d Figures up to the beginning of 1990.

Another important step taken by the new Government of Nicaragua was to propose, in the First Committee

of the United Nations General Assembly in 1990, that a process be initiated to make Central America a zone of peace and cooperation. It saw such a process as part of a general movement towards democracy, cooperation and demilitarization in the subregion.[7]

Meanwhile, negotiations on arms and the reduction of armies continued, and at the meeting of the Security Commission held at Puntarenas, Costa Rica, from 15 to 17 December 1990, a preliminary agreement was worked out that would permit El Salvador to maintain a proportionally greater number of troops and arms until such time as a political solution was found to the Salvadorian conflict. Together with this formula of relative symmetry, progress was also made on designing a factor chart setting out basic criteria for measuring the military capacity of the various countries, with a view to making progress towards the goal of establishing a reasonable balance of forces in the region. Some proposals and concepts from the Contadora peace plan were taken up again in these negotiations on military aspects of security.

On the whole, no conclusive agreements were arrived at in 1990 in the area of disarmament, but negotiations continued and differences were steadily ironed out at each stage of the negotiations. If the process of national reconciliation moves ahead in Guatemala and El Salvador, that would offer new prospects for the Governments of the region to adopt specific agreements aimed at gradual regional demilitarization.[8]

National Reconciliation in Central America

Nicaragua

As part of the policy of national reconciliation, the new Government of Nicaragua immediately turned to the task of ensuring the final disarmament of the contras.

President Chamorro promised the rebels security guarantees and land for their reintegration into the economic life of the country, in exchange for their demobilization and the surrender of their weapons to United Nations military observers.

The first meeting on disarmament in Nicaragua, which resulted in the Tocontín Agreement, signed on 23 March 1990, brought together members of the newly elected Government, the Archbishop of Managua, Miguel Obando y Bravo, and the leaders of the Nicaraguan Resistance. At the meeting, agreement was reached on an "effective" cease-fire and on the delimitation of zones for disarmament. Despite this commitment, a large number of contras persisted in demanding that the Sandinist army be disarmed at the same time. A further disarmament agreement was signed on 5 May 1990, only two weeks after the inauguration of the new Government. Again, zones were specified for the surrender of weapons to United Nations forces. On 27 June 1990, the last commanders of the contra General Staff laid down their weapons.[9]

The United Nations and the Organization of American States (OAS) performed various functions in Nicaragua, for both the Sandinist Government and the Government of Violeta Chamorro attached importance to the role of multilateral organizations in ensuring a peaceful transition in Nicaragua, in both the electoral and the military spheres. After the election, the new Government renewed and broadened the mandate of the United Nations Observer Group in Central America (ONUCA) and prolonged the presence of the International Support and Verification Commission (CIAV) set up by the United Nations and OAS. These bodies played an important role in securing the signature and the implementation of the demobilization agreements signed between the new Government and the insurgents.

El Salvador

At the beginning of the 1990s, El Salvador and Guatemala became the only countries in the region, with the exception of Panama, still experiencing serious problems of political and military instability.[10] The FMLN of El Salvador, taking advantage of the ground gained by the left-wing opposition as a result of the Esquipulas agreements, had been reiterating its readiness to negotiate with the Salvadorian Government a peaceful solution to the national crisis.[11] This position was welcomed even by the United States State Department. Both the Government and the FMLN formally accepted United Nations mediation of the talks and, at the outset, procedural agreements were reached. Between 1984 and the end of 1990, 11 rounds of talks were held, and the twelfth was scheduled for March of this year. However, by the end of April 1991, no definite agreements had been reached on ending the war, which after 10 years has taken a toll of more than 80,000 lives.[12]

On 14 April 1990, under United Nations auspices, the parties to the Salvadorian conflict signed a short but important agreement emphasizing that the initial objective of the negotiations was to reach political agreements and then to agree to a cessation of hostilities. At the time, President Alfredo Cristiani had no choice but to accept this order of priorities because of pressures from the United States Congress, which was threatening to cut aid to El Salvador by 50 per cent.

It should be noted that at the meeting, held at Caracas from 16 to 21 May 1990 under United Nations auspices, the parties drew up an agenda for the talks which included the following points: (1) restructuring of the armed forces, (2) human rights, (3) administration of justice, (4) electoral process, (5) constitutional reform, (6) economic and social problems and (7) international

verification of compliance with commitments. Once certain basic agreements had been reached on those topics, talks on the cease-fire would begin.

After a decade of war in El Salvador, the great majority of those involved have conceded that the causes of the violence in the country stem from the serious social inequalities which have always characterized Salvadorian society. The Government of Alfredo Cristiani, for its part, already weakened by the unsatisfactory investigation into the deaths of the six Jesuits murdered in late 1989, suffered a number of additional set-backs in the early months of 1991. Some quarters outside the country that inclined to the view that the Government was unable to control the military and the security forces now began to suggest that factions within the Cristiani Government were colluding openly with those forces to cover up their excesses.[13]

These circumstances notwithstanding, the negotiating process has continued in El Salvador. The Personal Representative of the United Nations Secretary-General, Alvaro de Soto, mediator of the negotiations, submitted to the Government and the FMLN in October 1990 a working paper entitled "Agreement on the Salvadorian armed forces", aimed at addressing the main outstanding obstacle in the talks: demilitarization and the future role of the Salvadorian army.

At the January 1991 meeting, progress was made concerning the disbanding of paramilitary groups, civil defence forces and security forces. None of the parties was opposed to the appointment of a civilian to head the Ministry of Defence and the idea of an ad hoc commission to review the records of the armed forces was accepted in principle. It should be noted that two important developments occurred while the meeting was going on but did not alter the course of the negotiations: members of the Sandinist People's Army supplied the FMLN with 28 surface-

to-air missiles, and the missiles shot down an American military helicopter. These events, however, prompted the Bush Administration to lift the freeze on $42.5 million in military aid to the Cristiani Government by delivering six new planes and six helicopters, in addition to other military equipment, to replace aircraft recently shot down by the guerrillas.[14]

The FMLN sought to mitigate the negative consequences of this situation, and on 3 February 1991, under Mexican supervision, it returned to the Nicaraguan Government 17 SAM missiles which it had received in secret from members of the Sandinist People's Army. These missiles, along with the 11 others which the Salvadorian guerrillas admitted having fired, completed the shipment of 28 missiles received from Nicaragua.

Finally, despite the secrecy of the Mexico talks, it became known that the two parties had narrowed their differences on the subject of the armed forces. In particular, the Salvadorian Government in early 1991 announced a thorough restructuring of the country's security forces, a crucial aspect of which would be the removal from military jurisdiction of the National Police, the Treasury Police and the National Guard. These forces have played an important role in the counter-insurgency campaign, and have frequently been accused of participating in the activities of the death squads. Furthermore, the Minister of Defence announced the possible abolition of the paramilitary Civil Defence forces, another of the demands made by the FMLN.[15]

This demonstrates that the greatest achievement of the January and February 1991 meetings, beyond the modest progress made, was to have built mutual trust, creating a positive climate for upcoming meetings at which the obstacles that have so far prevented a peace agreement in the Salvadorian war will have to be overcome. Within

this framework, and in response to United States criticisms that the United Nations was not putting enough pressure on the FMLN, the insurgent group decided to withdraw its proposal for the disbanding of the Salvadorian army, which should make it easier to reach major agreements.[16]

Guatemala

In Guatemala as well, internal negotiations have begun again, encouraged by the relaxation of tensions brought about by the political changes in Nicaragua. The National Reconciliation Commission (CNR), created within the framework of the Esquipulas agreements, organized a meeting in March 1990 in Oslo, Norway, between the Guatemalan guerrilla movement, the Unidad Revolucionaria Nacional de Guatemala (URNG), and members of the Government, with a representative of the United Nations Secretary-General present, in order to negotiate an end to the civil war.[17]

A series of meetings was also held between the representatives of URNG and Guatemalan social sectors that in earlier years had opposed negotiations with the guerrillas (the first such meeting took place at Ottawa, Canada, from 22 to 24 August 1990). One of the objectives of these meetings is to seek agreement on economic, political and social reforms within the current institutional framework, and to consider a possible reform of the Guatemalan Constitution.[18]

Although the first round of talks between the Government and representatives of URNG had taken place in Madrid as early as 1987, no further meetings were held between then and March 1990, even though the rebels, on more than 22 occasions, appealed publicly for efforts to reach a negotiated political solution to the war. On 1 June 1990, at a third meeting held in Madrid, representatives of URNG and the Guatemalan Government reached a

preliminary peace agreement, which, however, has yet to be finalized.

None the less, Guatemalan President Jorge Serrano, who took office on 14 January 1991, announced that representatives of the Government and of URNG would meet in April to negotiate a "total peace" agreement to put an end to a war which has lasted more than 30 years and in which, according to international organizations, 100,000 people have died. In Mexico, URNG leaders gave CNR Chairman Bishop Rodolfo Quezada an affirmative response to President Serrano's initiative and also made a series of specific proposals for negotiation, foremost among which was the necessary reform of the Constitution.[19]

It will therefore be the responsibility of the newly elected Government and the guerrillas to give new impetus to this negotiating process. Even though national reconciliation between the insurgent forces and the Government will not come about overnight, the level of military confrontation has fallen off considerably and the conflict has moved to the political arena.

Conclusions

The Esquipulas process set a new course for negotiations in the region by standardizing procedures for resolving internal conflicts and by linking the issue of national reconciliation to regional disarmament and security.

None the less, the situation in the Central American isthmus in the near future is still likely to be complex, since the conflicts in Guatemala and El Salvador, through their own internal dynamic, could continue for a long time to come unless all the forces in society become part of the political process. The prolongation of the conflict in these countries is in turn adversely affecting the rest of the region in many ways: it is accelerating the arms race between

armed forces, keeping war-related migration flows high and aggravating the economic crisis which has already lasted for a decade. Without a doubt, the persistence of these conflicts is constantly jeopardizing the precarious geopolitical balance of the Central American region.

At the same time, the change of political regime in Nicaragua does not necessarily guarantee peace in a society where the poverty of the vast majority of the population and the difficulties of arriving at a political consensus among the main forces in society have been endemic problems.

The greatest challenge facing the Esquipulas process will therefore be to find mechanisms for solving the conflicts in Guatemala and El Salvador, and to consolidate the peace process in the Central American isthmus on the basis of comprehensive economic development, growing democratic control of States' decision-making processes, and implementation of the recommendations made in the Contadora peace plan for mutual confidence-building among the countries of the area. In that regard, the basic premises for this regional peace process continue to be negotiation and political consultation as the only legitimate means of resolving internal conflicts, and a reasonable balance of forces in which the prevailing criterion is the defensive capacities of armies.

Notes

1 On the Contadora process, see the chapter by Boris Yopo H., "Crísis y concertación política: la experiencia de Contadora y el Grupo de Río", in Heraldo Muñoz and Joseph Tulchin, eds., *Latin American Nations in World Politics* (Boulder, Colorado, Westview Press, 1991).

2 A/45/521-S/19085. For a detailed history of the launching of the Central American peace process see: Victor Millán, "Controlling conflicts in the Caribbean basin: national approaches", in Michael A. Morris and Victor Millán, eds., *Controlling Latin American Conflicts: Ten Approaches* (Boulder, Colorado,

Westview Press, 1983), pp. 41-69; also in Bruce M. Bagley, ed., *Contadora and Diplomacy of Peace in Central America*, vols. I and II (Boulder, Colorado, Westview Press, 1987).

3 See *Panorama Centroamericano* (Guatemala), No. 48, April 1990. It must be mentioned that at the Montelimar summit meeting, agreement was reached to include Panama in the Esquipulas process. This was motivated by the principle of homogeneity among the Governments of the area, since after the United States invasion and the subsequent overthrow of Noriega, there were theoretically no differences between Panama's position on political, economic and social issues and that of the other countries of the region.

4 "Baker garantiza apoyo a la paz", in *El Gráfico* (Guatemala), 19 June 1990.

5 By November 1990, the Nicaraguan army had been reduced to 28,000 men, a 55 per cent cut in one year. There had been no troop reductions in the armies of Guatemala, El Salvador and Honduras by that date, however. See *Barricada* (Managua), 25 November 1990.

6 See statements by the Deputy Minister for Foreign Affairs of Honduras in a cable of the *Notimex* agency, San José, dated 24 November 1990. The Nicaraguan position can be found in an article in *La Prensa* (Managua), 4 September 1990, p. 1.

7 See *Official Records of the General Assembly, Forty-fifth Session, First Committee*, 22nd meeting. In December 1990, at Puntarenas, Costa Rica, the Central American Presidents declared Central America to be a region of peace, freedom, democracy and development. (See United Nations document A/45/906-S/22032, annex.)

8 It is important to remember that the United Nations, through ONUCA, played an active role in the plan for the demobilization and repatriation of the Nicaraguan insurgent forces, and in the International Support and Verification Commission (CIAV), which supervised fulfilment of the commitments on termination of aid to irregular forces and non-use of the territory of one State to attack other States. It also established mechanisms for receiving the weapons, equipment and supplies of the Nicaraguan contras. OAS also played an important role in the CIAV and, subsequently, in observing Central American elections, supervising the transfer of power in the countries concerned.

9 The complete text of the "Effective and Definitive Cease-Fire Agreement" was reproduced in United Nations document A/44/941-S/21272, annex II.

10 It should be noted that, in the early 1980s, Panama tried to escape the cycle of violence in the region by joining the Con-

tadora Group. However, since 1987 it has been rocked by acute internal political conflict in which geopolitical factors play a major role because of the imminence of the hand-over of the Canal. The United States even resorted to military invasion on 20 December 1989 to secure the departure of General Noriega as commander of the Defence Forces, justifying its action as forming part of its policy of combating drug trafficking in Latin America.

11 According to national surveys on the question of a peaceful solution to the war, the percentage supporting dialogue and negotiation increased from 29.2 per cent in September 1986 to 51.1 per cent in July 1987 and 63.5 per cent in June 1990. See: Ricardo Córdova M., *El Salvador: El tema de la paz en el debate electoral* (paper presented at the Fifteenth Congress of the Latin American Studies Association, Miami, Florida, held from 4 to 6 December 1989); and IUDOP, "La opinión pública a un año de gobierno de Cristiani", *ECA* (El Salvador), No. 500-501, June-July 1990, pp. 507-516.

12 *La Epoca* (Santiago, Chile), 28 February 1991, p. 5.

13 *Informe Latinoamericano* (Latin American newsletter), IL-91-08, 28 February 1991, p. 5.

14 On the theft and shipment of the missiles to the Salvadorian guerrillas, see: Gabriela Selser, "El caso de los mísiles. EPS: entre la moral y la ley", in *Barricada Internacional* (Managua), año XI, No. 333, 2 February 1991, pp. 5-7. On the North American transfer of military equipment, see: *Informe Latinoamericano* (Latin American newsletter), IL-91-06, 14 February 1991, p. 1.

15 See: *Informe Latinoamericano*, *ibid.*, p. 1.

16 On the January 1991 meetings, see the informative article by Sergio Sánchez, "El Salvador: una paz posible", in *La Nación* (Santiago, Chile), 8 February 1991, p. 11.

17 United Nations document A/45/706-S/21931, annex III.

18 *Informe Latinoamericano* (Latin American newsletter), IL-90-03, 23 August 1990, p. 12.

19 *La Epoca* (Santiago, Chile), 17 April 1991, p. 3.

Documentation Relating to Disarmament

Resolution 271 (XII), adopted by the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean at its twelfth regular session, entitled "Foz de Iguazú Declaration on the joint nuclear policy of Argentina and Brazil"*

Mexico City, 9 May 1991

The General Conference,

Reaffirming that the prohibition of nuclear weapons in Latin America and the Caribbean is a priority objective for all countries in the region,

Emphasizing that it is important, for the achievement of this objective, that all countries in Latin America and the Caribbean should become parties to the Treaty of Tlatelolco,

Underscoring that it is incumbent upon the countries possessing nuclear weapons to permit the consolidation of Latin America and the Caribbean as a nuclear-weapon-free zone by becoming Parties to Protocol II to the Treaty, and that it is important that all States having responsibility for territories within the zone defined by the Treaty should become full Parties to Protocol I to the Treaty,

Bearing in mind that the Presidents of Argentina and Brazil signed the Foz de Iguazú Declaration on joint nuclear policy on 28 November 1990, thereby undertaking to "Take, once the Agreement on safeguards is concluded with the International Atomic Energy Agency, appropriate initiatives so that the Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco) may enter fully into force with respect to the two countries, including negotiations to update and improve the text thereof",

Conscious of the importance of that Declaration for the prohibition of nuclear weapons in Latin America and the Caribbean,

*A/46/297, annex.

Desiring that the process embarked upon by Argentina and Brazil should facilitate the full entry into force of the Treaty of Tlatelolco,

Resolves to:

1 *Welcome* with satisfaction the presidential Foz de Iguazú Declaration on the joint Argentine-Brazilian nuclear policy of 28 November 1990;

2 *Highlight* the importance of the measures being adopted by Argentina and Brazil to put into practice what is envisaged in the Declaration, in accordance with the objectives and purposes of the Treaty of Tlatelolco;

3 *Express* the hope that negotiations between Argentina and Brazil with the International Atomic Energy Agency for the elaboration of an agreement on safeguards may promptly result in an agreement that is satisfactory to the parties involved;

4 *Offer* its collaboration for the success of the negotiations envisaged in the Declaration so that the Treaty of Tlatelolco may enter fully into force for both countries;

5 *Invite* Argentina and Brazil to keep it informed of the progress made in the implementation of that Declaration.

Adopted at the 69th meeting, on 9 May 1991.

Agreement between the Government of Hungary and the Government of Romania on the Establishment of an Open Skies Regime*

Bucharest, 11 May 1991

The Government of the Republic of Hungary and the Government of Romania, hereinafter referred to as the Parties;

Recalling their commitments in the Conference on Security and Cooperation in Europe to promoting greater openness and transparency of their military activities and to enhancing security by means of confidence and security building measures;

Seeking to implement in their bilateral relations in addition to the provisions of the 1990 Vienna Document of the Negotiations on Confidence- and Security-Building Measures, further cooperative confidence and security building measures;

Reaffirming their desire to further contribute to the successful conclusion of the negotiations of the Open Skies Conference, as expressed in the Charter of Paris for a New Europe;

Convinced that a successful bilateral Open Skies regime provides valuable experience for the elaboration of an Open Skies Treaty, and the simultaneous functioning of the two regimes will lead to enhanced confidence and security;

Noting that an Open Skies regime and its successful implementation would encourage reciprocal openness on the part of the States Parties, enhance the predictability of their military activities and strengthen confidence between them;

Convinced that the Open Skies regime will be implemented on a reciprocal and equitable basis which will protect the interest of each State Party;

Noting the possibility of employing the results of such overflights to improve openness and transparency, to enhance confidence and security building, and to improve the monitoring of, and thus promote compliance with, current or future arms control measures;

Noting that the operation of an Open Skies regime will be without prejudice to States not parties to this Agreement;

*A/46/188-S/22638, annex.

Believing that an effective Open Skies regime would serve to consolidate improved goodneighbourly relations between the States Parties;

Have agreed as follows:

Article I. Definitions

For the purposes of this Agreement and its Annexes:

1 The term "Aircrew Member" means an individual from any of the two Parties who has been designated and accepted in accordance with Article XIX. of this Agreement, and who performs duties associated with the operation or maintenance of the Observation Aircraft or its sensors, and who participates as a member of the aircrew of the Observation Aircraft during the Observation Flight, or who is an Inspector Escort.

2 The term "Observation Crew Member" means an individual from the Observing Party who has been designated and accepted in accordance with Article XIX. of this Agreement, and who performs duties associated with the operation of the sensors of the Observation Aircraft of the Observed Party and who participates as an Aircrew Member of the Observation Aircraft of the Observed Party during the Observation Flight.

3 The term "Flight Monitor" means an individual designated by the Observed Party to be on board the Observation Aircraft during the Observation Flight and who performs duties in accordance with Annex D.

4 The term "Flight Plan" means a flight plan of the Observing Party meeting the requirements of Article VI.

5 The term "Hazardous Airspace" means areas of an Observed Party in which there are invisible or unusual dangers to the safety of the aircraft. Hazardous airspace include prohibited areas, restricted areas and danger areas, established in the interest of flight safety, public safety and environmental protection and published by the Observed Party in accordance with ICAO rules in the Aeronautical Information Publication (AIP).

6 The term "Inspector" means an individual who is designated by the Observed Party or Observing Party to conduct inspections of the Observation Aircraft, its equipment, its sensors in accordance with Article IX. and Annex C.

7 The term "Inspection Team" means the group of inspectors designated by the Observed Party or Observing Party to conduct the

inspection of the Observation Aircraft, its equipment and its sensors in accordance with Article IX. and Annex C.

8 The term "Inspector Escort" means a designated representative of the Observing Party or the Observed Party who has been authorized to monitor all activities of Inspectors and the Inspection Team during inspections and perform other specified duties in accordance with Article IX. and Annex C.

9 The term "Inspection" means that activity described in and performed pursuant to Article IX. and Annex C.

10 The term "Period of Inspection" means the period of time during which the Inspection Team inspects the Observation Aircraft, its equipment and its sensors in accordance with Article IX. and Annex C.

11 The term "Observation Aircraft" means an unarmed, fixed wing aircraft, capable of carrying two Observed Party Flight Monitors in addition to its Aircrew Members. An aircraft is considered unarmed when it is not carrying any armament (munitions) of any type or equipment dedicated to armament operations.

12 The term "Observation Flight" means a flight and any accompanying refuelling stops, conducted in accordance with the provisions and restrictions of this Agreement by an Observation Aircraft over the Territory of an Observed Party.

13 The term "Observed Party" means a Party over whose Territory an Observation Flight is conducted.

14 The term "Observing Party" means a Party conducting an Observation Flight.

15 The term "Point of Entry" means the Airfield(s) in the Territory of each Party that are designated in Annex B. for the departure of the Observation Aircraft from the Observed Party's Territory.

16 The term "Point of Exit" means the Airfield(s) in the Territory of each Party that are designated in Annex B. for the departure of the Observation Aircraft from the Observed Party's Territory.

17 The term "Permitted Observation Equipment" means on-board observation equipment of the Observation Aircraft as described in Annex E.

18 The term "Quota" means the number of Observation Flights that each Party undertakes to accept annually ("Passive Quota") and also the number of Observation Flights each Party shall have the right to conduct annually ("Active Quota"), as set forth in Annex A.

19 The term "Arrival Fix" means the compulsory reporting point specified and promulgated by the Observed Party in Annex B. through

which the Observation Aircraft shall enter the territorial airspace of the Observed Party.

20 The term "Departure Fix" means the compulsory reporting point specified and promulgated by the Observed Party in Annex B. through which the Observation Aircraft shall depart the territorial airspace of the Observed Party.

21 The "ATS" Route means a specified route designed for channelling the flow of traffic as necessary for the provisions of Air Traffic Services.

Article II. Basic Rights and Obligations of the Parties

1 Each Party shall have the right to conduct Observation Flights in accordance with the provisions of this Agreement.

2 Each Party undertakes to permit Observation Flights over its Territory in accordance with the provisions of this Agreement.

3 Each Party may conduct Observation Flights with its own Observation Aircraft or the Observation Aircraft of the other Party.

4 Areas with Hazardous Airspace are excepted in accordance with the provisions of Articles I., VIII. and Annex G.

Article III. Quotas of Observation Flights

1 For the purposes of fulfilling objectives of this Agreement, each Party shall have the right to conduct and undertakes the obligation to accept an agreed number of Observation Flights in accordance with Annex A.

2 The number of Observation Flights a Party shall be allowed to conduct shall be equal to the number of overflights it shall be required to accept.

Article IV. Observation Aircraft

While conducting flights under this Agreement the Observation Aircraft shall comply with the provisions of this Agreement.

Unless inconsistent with the provisions of this Agreement, the Observation Aircraft shall also comply with:

a the published standards and recommended practice of ICAO;

b published national air traffic control rules, procedures and guidelines on flight safety of the Observed Party; and

c the instructions of the ATC authorities and the ground control services.

Article V. Pre- and Post-Observation Flight Procedures

1 Upon entry into force of this Agreement, each Party shall provide the other Party with the following information:

a emergency airfields between its Arrival Fixes and Points of Entry and between its Points of Exit and its Departure Fixes;

b instrument arrival and departure procedures:

—for its Points of Entry and Exit;

—for its alternate airfields near its Points of Entry and Exit;

—for suitable airfields along the route of flight which may be used in an emergency.

2 Each Party shall promptly notify the other Party of any updates and amendments to such information.

3 A Party may change the location of its Points of Entry and/or Exit upon three months prior notification to the other Party.

4 In order to conduct an Observation Flight, the Observing Party shall notify the Observed Party of the estimated time of arrival of its Observation Aircraft at the Observed Party's Point of Entry. Such notice shall be given not less than 24 hours in advance of the estimated time of arrival.

5 The notification to the Observed Party shall also indicate the type and model of the incoming aircraft, its registration number and call sign, as well as the names, passport types and numbers and functions of each Aircrew Member.

6 In case the Observing Party intends to use the Observation Aircraft of the Observed Party, it shall submit its request to do so 7 days in advance of the proposed time of the commencement of the Observation Flight.

7 Upon completion of the Observation Flight, the Observation Aircraft shall depart the Territory of the Observed Party from the Point of Exit. The departure flight from the Point of Exit shall commence not later than 24 hours following the completion of the Observation Flight, unless weather conditions or the airworthiness of the Observation Aircraft do not permit.

Article VI. Flight Plans and Conduct of Observation Flights

1 Within six hours following the arrival of the Observation Aircraft or the Observation Crew at the Point of Entry, the Observing Party shall submit a Flight Plan for the Proposed Observation Flight to the Ob-

served Party. The Observed Party shall as soon as possible review and approve or amend and approve the proposed Flight Plan in accordance with the provisions of this Agreement.

2 The Observation Flight shall be conducted in accordance with the approved Flight Plan and in accordance with clearances and instructions from the Observed Party's air traffic controllers.

3 The Flight Plan shall have the content according to Annex 2 to the Convention on International Civil Aviation, signed in Chicago, 1944, and be in the format specified by ICAO Document 4444-RAC/501, Rules of the Air and Air Traffic Services, as amended or revised.

4 The Flight Plan shall provide and require that:

a the planned duration of the Observation Flight shall not exceed the duration of Observation Flights that is set forth in Annex A;

b the Observation Flight commences not earlier than 16 hours and not later than 48 hours after delivery of the Flight Plan to the Observed Party;

c the Observation Aircraft shall fly a direct route between the coordinates or navigation fixes designated in the Flight Plan, and shall visit each coordinate or navigation fix in the declared sequence set forth in the Flight Plan; and

d the Observation Aircraft shall not hold over, delay departure from or otherwise loiter at any point of its approved Flight Plan route nor otherwise unreasonably disrupt the normal flow of air traffic except:

—as allowed for in the approved flight plan;

—as necessary for the purposes of arrival or departure at designated airfields when executing published procedures or the instructions of air traffic control;

—as instructed by air traffic control;

—as required for reasons of flight safety;

—flight tracks shall be permitted to intersect provided that no point of intersection is crossed more than once on any observation flight.

5 The Observed Party shall ensure that Aircrew Members are given the Observed Party's most recent weather and safety information pertaining to the Flight Plan for each Observation Flight, including Notices to Airmen, IFR procedures and information about alternate and emergency airfields along the flight route stated in the approved Flight Plan.

6 All Observation Flights shall be carried out in compliance with the provisions of this Agreement and ICAO standards and recommended practice, and with due regard for differences existing in national

rules and regulations, published in AIP or in accordance with national flight and air traffic control requirements of which the Observation Aircraft's Aircrew shall be informed.

7 In the event that the Observation Aircraft makes a deviation from the Flight Plan, as permitted under Article XIII. of this Agreement, the additional flight time arising from such deviation shall not count against the duration specified in Annex A.

Article VII. Sensors

1 Each Party may use during Observation Flights any sensor that is necessary for reaching the objectives of this Agreement listed in Annex E. Sensors not listed in Annex E are prohibited and shall not be on board of the Observation Aircraft.

2 The Parties undertake to use the same types of sensors of comparable capability and to this end to facilitate access to such sensors for use by the other Party.

3 The Observation Aircraft shall be equipped with the same sensors, when used upon request by the other Party.

4 Data acquired by sensors during Observation Flights will remain encapsulated on board the Observation Aircraft until the termination of the Observation Flight. Sensor data link operations of any kind are prohibited.

5 As provided in Paragraph 4, of Article XVI. of this Agreement, a Party may utilize a type or model of sensor not listed in Annex E for or in connection with an Observation Flight upon:

a receiving the approval of the Hungarian-Romanian Open Skies Consultative Commission (HROSCC), and

b making a representative type or model of such sensor available for pre-flight examination by the other Party in accordance with the provisions of Annex E.

6 Any Party operating an Observation Aircraft will ensure that the sensors function to specifications and also that their specifications conform with agreed requirements.

Article VIII. Hazardous Airspace

1 Observation Aircraft may conduct Observation Flights anywhere over the Territory of the Observed Party in accordance with Article II. and Article VI.

2 Hazardous Airspace must be publicly announced. Such public announcements must specify the dangers to the Observation Aircraft and Aircrew Members. Each Party shall ensure that such public an-

nouncements of Hazardous Airspace are promptly provided to the Other Party by the source designated by the Party in Annex H.

3 Particular Hazardous Airspace announced in Annex H must be taken into account by the Observing Party when preparing an Observation Flight Plan.

4 Each Party may introduce amendments and additions to Annex H, giving notice thereof to the other Party.

5 In case of need, the Observed Party shall inform the Aircrew Members during preparations for the Observation Flight of the new particular Hazardous Airspace, indicating the causes for the restrictions introduced.

6 In the event that the Flight Plan of the Observing Party requests overflight of Hazardous Airspace of the Observed Party, the Observed Party shall approve the Flight Plan if it conforms with Article VI., but may amend it to specify the minimum safe altitude over the Hazardous Airspace. This minimum safe altitude shall be made part of the Flight Plan. If there is no minimum safe altitude available consistent with air safety requirements, the Observed Party shall propose an alternative flight routing as near to the Hazardous Airspace as is permitted by air safety requirements. Alternatively the Observed Party may propose that the time of arrival of the Observation Aircraft over the Hazardous Airspace be amended to a time consistent with flight safety requirements. Such alternative flight routing or timing shall be incorporated in a revised Flight Plan and approved by the Observed Party.

7 The Observing Party may elect either to conduct the Observation Flight on the basis of an amended Flight Plan, avoiding the particular Hazardous Airspace, or to cancel the Observation Flight. In that latter event, the Observation Aircraft or the Observation Crew shall depart the Territory of the Observed Party in accordance with Article V. and no overflight shall be recorded against the Quota of either Party.

8 In the event the Observing Party informs the Observed Party that denial of access to any portion of the Hazardous Airspace of the Observed Party was not justified on the basis of air safety considerations and in a further event that the matter is not resolved through diplomatic channels, the Observing Party may raise the matter for consideration in the Hungarian-Romanian Open Skies Consultative Commission pursuant to Article XVI. of this Agreement.

Article IX. Aircraft and Sensor Inspections

When an Observation Flight is conducted using an Observation Aircraft of the Observing Party, upon delivery of the Flight Plan, unless

otherwise mutually agreed to by the Observed and the Observing Party, the Inspection Team of the Observed Party may inspect the Observation Aircraft, accompanied by Inspector Escorts of the Observing Party, to determine whether there is any Prohibited Equipment on the Observation Aircraft. Such inspection shall terminate no later than three hours prior to the scheduled commencement of the Observation Flight set forth in the Flight Plan. All such inspections shall be conducted in accordance with Annex C.

Article X. Flight Monitors on Observation Aircraft

The Observed Party shall have the right to have two Flight Monitors on board the Observation Aircraft during each Observation Flight in accordance with Annex D. Such Flight Monitors shall have the right of access to all areas of the Observation Aircraft during the Observation Flight. Flight Monitors have the rights and obligations specified in Annex D. In discharging their functions, Flight Monitors shall not interfere with the activities of the Aircrew Members.

Article XI. Observation Aircraft Servicing and Maintenance

1 The Observed Party shall, upon request, provide

a customary commercial aircraft fuelling, servicing, and maintenance for the Observation Aircraft at the Point of Entry or Exit and at any predesignated refuelling point specified in the Flight Plan; and

b meals and the use of rest facilities for Observation Aircraft Aircrew Members.

2 On request of the Observing Party, further services will be agreed upon between the Parties in order to guarantee the effective realization of the Observation Flight. Should unscheduled technical demand arise for the Observation Aircraft, the necessary support will be provided without delay by the Observed Party. A protocol about the obtained services will be established between the Inspector Escort of the Observing Party and a responsible officer of the Observed Party at the Point of Entry or Exit.

3 The Observing Party shall reimburse the Observed Party for the ordinary and reasonable costs of such fuelling, maintenance, servicing, meals and use of rest facilities. The amount of reimbursement will be agreed upon by the Parties on a case-by-case basis and will represent a fair estimate of the cost of such services at the time rendered, exclusive of taxes, fees, duties or other similar charges.

4 The Observing Party shall reimburse the Observed Party for the

use of the Observation Aircraft of the Observed Party. The Observed Party shall inform in advance the Observing Party of the estimated cost of one flight hour by the Observation Aircraft.

5 Such charges shall not be greater than that which the Observed Party would charge itself for the same service.

Article XII. Prohibition, Correction or Curtailment of Observation Flights

1 The Observed Party, by notifying the Observing Party, may prohibit prior to its commencement, or correct or curtail in a non-harmful manner subsequent to its commencement, any Observation Flight:

a that is not permitted by the terms of Annex A;

b for which a Flight Plan has not been filed in accordance with this Agreement;

c that arrives at the Point of Entry less than 24 hours after the notification required by Article V. of this Agreement;

d that fails to arrive at the Point of Entry within 6 hours of the estimated time of arrival set forth in said notification;

e that deviates from the Flight Plan, except as permitted by Article XIII. of this Agreement;

f that is conducted by an aircraft other than an Observation Aircraft; or

g that is otherwise in non-compliance with the terms, conditions, provisions and restrictions of this Agreement.

2 The Observed Party may correct or curtail in its territorial airspace a flight to a Point of Entry or from a Point of Exit that deviates from the direct route required by Article VI.

3 When an Observed Party prohibits, corrects or curtails an Observation Flight in accordance with this Article, it must provide in writing to the Observing Party through routine diplomatic channels an explanation for its action.

4 An Observation Flight that has been prohibited shall not be recorded against the Quota of the Observed Party. A proposed Observation Flight that has been corrected or curtailed shall not be recorded against the Quota of the Observed Party.

5 Disputes bearing on this Article may be submitted to the Hungarian-Romanian Open Skies Consultative Commission for resolution as stipulated in Article XVI. of this Agreement.

Article XIII. Deviations and Emergencies

1 Notwithstanding any other provisions of this Agreement devia-

tions by an Observation Aircraft from a Flight Plan or from the routes to and from the Points of Entry and Exit, that are necessitated by (*a*) adverse weather conditions, (*b*) air traffic control instructions related to flight safety, or (*c*) aircraft mechanical difficulty or other event beyond the control of the Observing Party, shall not be deemed a violation of this Agreement and shall not be grounds for correction, curtailment or prohibition by the Observed Party of an Observation Flight, a flight arriving at a Point of Entry or a flight departing from a Point of Exit.

2 Any Observation Aircraft declaring an emergency shall be accorded the Observed Party's full range of distress and diversion facilities in order to ensure the most expeditious recovery to the nearest suitable airfield. A full investigation of the declaration shall be conducted in accordance with the regulations of the Observed Party, with the participation of the Observing Party, at a place of the Observed Party's choosing.

3 In the case of an accident involving the Observation Aircraft in the Territory of the Observed Party, search and rescue operations will be conducted by the Observed Party in accordance with its own regulations and procedures for such operations. A full investigation of the accident by the Observed Party shall be conducted in accordance with the regulations of the Observed Party, with the participation of the Observing Party at a place of the Observed Party's choosing. At the conclusion of the investigation, all wreckage and debris of the Observation Aircraft, equipment, and sensors if found and recovered will be returned to the Observing Party if so requested.

Article XIV. Non-Interference

No Party shall use any device or equipment to interfere with the operation of the Observation Aircraft, with the functioning of the sensors, or with the safe conduct of any Observation Flight.

Article XV. Use of Information

1 Information acquired through Observation Flights shall be used exclusively for the attainment of the purpose of this Treaty.

2 Both the Observing and the Observed Parties shall receive complete set of the data obtained as a result of the processing of observation materials.

3 Observation materials obtained as a result of an Observation Flight shall be processed in accordance with Annex H.

4 Information obtained by a Party as a result of Observation

Flights must not be used to the detriment of the other Party's security or other interests and must not be transferred to any third State.

Article XVI. Hungarian-Romanian Open Skies Consultative Commission

1 To promote the objectives and implementation of the provisions of this Agreement, the Parties hereby establish the Hungarian-Romanian Open Skies Consultative Commission (hereinafter referred to as "the Commission").

2 The Commission shall make decisions and undertake actions on the basis of agreement of the Parties.

3 Each Party may raise before the Commission any issues concerning compliance with the obligations of this Agreement.

4 The Parties shall meet within the framework of the Commission to:

a agree upon such technical and administrative measures, consistent with this Agreement, as may be necessary to ensure the viability and effectiveness of this Agreement;

b consider questions relating to compliance with the obligations assumed under this Agreement;

c agree on updates to the Annexes that so provide; and

d consider and act upon all matters referred to it by a Party pursuant to this Agreement.

5 General provisions for the operation of the Commission are set forth in Annex F.

Article XVII. Notifications

Except as otherwise stipulated, the Parties shall provide the notifications required by this Treaty through diplomatic channels.

Article XVIII. Liability

A Party shall, in accordance with international law and practice, be liable to pay compensation for damage to the other Party, or to its natural or juridical persons or their property, caused by it in the course of the implementation of this Agreement.

Article XIX. Aircrew Members and Inspection Crew Members

1 Aircrew Members and Inspection Crew Members shall be designated by each Party in the following manner:

a Within 30 days after signature of this Agreement each Party shall

provide to the other Party for its review a list of proposed Aircrew Members and Inspection Crew Members who will conduct Observation Flights for that Party. This list shall not exceed 30 persons and shall contain the name, birth date, rank, function and passport type for each person on the list. Each Party shall have the right to amend its list of Aircrew Members and Inspection Crew Members. Each Party shall have to provide to the other Party its amended list of Aircrew Members and Inspection Crew Members.

b If any person on the original or amended list is unacceptable to the other Party, it shall, within 14 days, notify the Party providing the list that such persons will not be accepted as Aircrew Members and Inspection Crew Members. Persons not declared unacceptable within 14 days are deemed accepted as Aircrew Members and Inspection Crew Members. In the event that a Party subsequently determines that an Aircrew Member or an Inspection Crew Member is unacceptable, the Party shall so notify the Party that designated the Aircrew Member or Inspection Crew Member, which shall, not later than two working days thereafter, strike such person from its Aircrew Member and Inspection Crew Member list.

2 In order to exercise their functions effectively, for the purpose of implementing the Agreement, Aircrew Members and Inspection Crew Members shall be accorded the inviolability and immunities as specified in Articles 29, 30, paragraph 2 with respect to papers and correspondence and 31 of the Convention on Diplomatic Relations done in Vienna on 18 April 1961. Such inviolability and immunities shall be accorded for the entire period from the arrival of the Aircrew Members or Inspection Crew Members to the Territory of the Observed Party until their departure from it, and thereafter with respect to acts previously performed in the exercise of their official functions as Aircrew Members or Inspection Crew Members. The immunity from jurisdiction may be waived by the Observing Party in those cases when it is of the opinion that immunity would impede the course of justice and that it can be waived without prejudice to the Agreement. Such waiver must always be express. Without prejudice to their inviolability and immunities or to the rights of the Observing Party under this Agreement, it is the duty of Aircrew Members and Inspection Crew Members to respect the laws and regulations of the Observed Party.

3 Aircrew Members and Inspection Crew Members of a Party shall be permitted to bring into the Territory of the Observed Party, without payment of any customs duties or related charges, articles for their

personal use, with the exception of articles the import or export of which is prohibited by law or controlled by quarantine regulations.

4 In the event that either the Observing Party or the Observed Party considers that there has been a violation or an abuse of the inviolability or immunities accorded under this Article, that party may forward a report specifying the nature of the issue to the Commission for consideration.

Article XX. Ratification, Entry into Force

1 The present Agreement is subject to ratification in accordance with constitutional procedures of each Party.

2 This Agreement shall enter into force upon the exchange of the instruments of ratification.

Article XXI. Amendments; Implementing Measures; Periodic Review

1 Each Party may propose amendments to this Agreement. Agreed amendments shall enter into force in accordance with the procedures set forth in Article XX. governing the entry into force of this Agreement.

2 Any decision taken by the Commission pursuant to sub-paragraphs (*a*) or (*c*) of Paragraph 4 of Article XVI. shall be deemed not to be amendments to this Agreement.

3 Within 60 days of the signature of a multilateral Open Skies Treaty a session of the Commission is to be convened to consider matters related to the further implementation of this Agreement.

Article XXII. Duration; Denunciation

1 This Agreement shall be of unlimited duration.

2 Each Party may denunciate this Agreement if it decides that extraordinary events related to the subject matter of this Agreement have jeopardized its supreme interests. A Party intending to denunciate the Agreement shall give notice of its decision to the other Party at least six months in advance of its denunciation.

3 In the event that a Party gives notice of its decision to denunciate this Agreement in accordance with paragraph 2 of this Article, a meeting of the Commission shall be convened by the Parties within 30 days after such a notification has been received in order to consider practical matters related to the denunciation of the Agreement.

Article XXIII. Registration

1 This Agreement shall be registered pursuant to Article 102 of the Charter of the United Nations.

Article XXIV.

This Agreement contains XXIV Articles and Annexes A-H, all of which form an integral part of this Agreement.

Done at ....., this ..... day of ....., 19..., in two copies, each in Hungarian and Romanian languages, all two texts being equally authentic.

Annex A

	Hungary	*Romania*
Number of Observation Flights per Year	4	4
Maximum Length of Observation Flights	3 hours	3 hours
Maximum Distance of Observation Flight	1,200 km	1,200 km

This Annex may be updated by the Commission. This update shall not be considered an amendment of the Agreement.

Annex B

	Hungary	*Romania*
Points of Entry and Exit:	Budapest – Ferihegy Szolnok	Bucharest – Otopeni Timisoara
Arrival and Departure Fixes:	All Arrival and Departure Fixes along the Hungarian-Romanian border published in the AIP.	
Air Routes to and from Points of Entry and Exit:	The international airways.	
Language to be used during briefings:	Hungarian	Romanian

This Annex may be updated by the Commission. This update shall not be considered an amendment of the Agreement.

Annex C — Inspections

The following procedures shall govern the inspection of the Observation Aircraft by the Inspection Team conducted to determine whether there is any prohibited equipment on the Observation Aircraft pursuant to Article IX. of the Agreement.

1 Upon arrival of the Observation Aircraft at the Point of Entry,

the Inspection Team shall, if requested by the Inspector Escorts, provide the Inspector Escorts a briefing on how the Inspection Team intends to inspect the Observation Aircraft, including, but not limited to, any safety precautions pertaining to Inspection Team activities, and shall undertake the following measures:

a deliver to the Inspector Escorts a list of the members of the Inspection Team, which shall not exceed 10 members, unless otherwise agreed to by the Observing Party and the Observed Party, and a statement of the general function during the inspection of each member of the Inspection Team; and

b deliver to the Inspector Escorts a list of each item of inspection equipment to be used by the Inspection Team in conducting the inspection, which shall be limited to the following items:

i flashlights;

ii still and video cameras;

iii notepads, inspection records, rulers, pens, and pencils;

iv hand-held audio recorders, the use of which shall be limited to recording inspection activities;

v passive infrared sensors;

vi ultrasonic equipment;

vii lens measuring devices;

viii borescopes;

ix other specialized measurement equipment approved by the Inspector Escorts and appropriate for inspection of the type of Observation Aircraft, equipment and sensors being inspected; and

x other equipment as approved in writing by the Inspector Escorts for that inspection; and

c with the participation of the Inspector Escorts, conduct an inventory of each item of inspection equipment set forth on the list delivered by the Inspection Team pursuant to subparagraph 1(*b*) of this Annex, and review with the Inspector Escorts the accounting procedures the Inspector Escorts shall follow pursuant to Paragraph 9 of this Annex to confirm that each item of inspection equipment brought aboard the Observation Aircraft by the Inspection Team has been removed from the Observation Aircraft upon conclusion of the inspection.

2 Upon delivery of the Flight Plan, unless otherwise mutually agreed to by the Observed Party and Observing Party, the Inspection Team of the Observed Party may inspect the Observation Aircraft, accompanied by Inspector Escorts of the Observing Party, to determine

whether there is any Prohibited Equipment on the Observation Aircraft. All such inspections shall be conducted in accordance with Article IX. and the Annex C.

3 The Inspection Team shall be accompanied throughout the entire inspection of the Observation Aircraft by the Inspector Escorts to confirm that the inspection is being conducted in accordance with the provisions of this Annex. The Inspection Team shall facilitate the execution of this duty by the Inspector Escorts. The Inspector Escorts shall facilitate the inspection of the Observation Aircraft, its equipment, and its sensors by the Inspection Team.

4 In conducting its inspection, the Inspection Team shall have full access to the entire exterior and interior of the Observation Aircraft and its equipment. Such access shall be provided to, but not limited to, the following:

a cockpit;
b cabin area;
c tail section;
d nose;
e wings;
f engines;
g fuselage; and
h cargo and storage areas.

5 In conducting its inspection, the Inspection Team shall have full access to sensors. All access to sensors and electronic equipment associated with such sensors connected to or protruding from the exterior or located within the interior of the Observation Aircraft shall be obtained through access panels, where such access panels are designed to be opened, removed, and re-emplaced.

6 Notwithstanding the provisions of paragraphs 4 and 5 of this Annex, the inspection shall be conducted in a manner that does not:

a degrade or damage, or prevent subsequent operation of the Observation Aircraft, its equipment, or its sensors;
b alter the electrical or mechanical structure of the Observation Aircraft, its sensors, or its equipment; or
c impair the airworthiness of the Observation Aircraft.

The Inspection Team may not open compartments on board the Observation Aircraft, remove aircraft, sensor, or equipment panels, or remove physical barriers to access to the Observation Aircraft, its equipment, or its sensors; provided, however, that the Inspector Escorts shall, upon request, do all such opening or removal, to the extent that the compartments, panels and barriers in question are designed to be

opened, removed, and re-emplaced. The Inspector Escorts shall equip themselves with necessary tools to fulfil all such requests promptly. The Inspector Escorts shall be provided sufficient time during the inspection to re-emplace and secure all components, panels and barriers that are opened or removed, so that at the end of the inspection all such components, panels, and barriers are re-emplaced and secured.

7 Equipment not on the inspection equipment list delivered by the Inspection Team pursuant to subparagraph 1(*b*) of this Annex may not be brought on board the Observation Aircraft by the Inspection Team, nor may the Inspection Team bring weapons of any kind on board the Observation Aircraft.

8 The Inspection Team may make notes, photographs, video and voice recordings, sketches and similar records of the Observation Aircraft and sensors during the inspection, none of which shall be subject to any review or examination by the Observing Party.

9 Upon completion of the inspection, which shall terminate no later than three hours prior to the scheduled commencement of the Observation Flight, and shall have a duration of not more than 8 daylight hours, unless otherwise agreed by the Parties, the Inspection Team shall:

a withdraw from the Observation Aircraft and its immediate area to a location not closer than 25 meters from any part of the Observation Aircraft; and

b demonstrate to the Inspector Escorts that all inspection equipment on the list delivered pursuant to subparagraph 1(*b*) of this Annex has been removed from the Observation Aircraft.

The Inspector Escorts may use their own accounting procedures to confirm compliance with subparagraph (*b*) of this paragraph. If the Inspector Escorts are unable to confirm compliance with subparagraph (*b*) of this Paragraph, the Observed Party may prohibit the Observation Flight, and no Observation Flight shall be recorded against the Quota of either Party.

10 The Inspection Team shall immediately inform the Inspector Escorts of any equipment suspected to be Prohibited Equipment located by the Inspection Team on board the Observation Aircraft. If the Observing Party is unable to demonstrate that the items in question are not Prohibited Equipment, the Observed Party may prohibit the Observation Flight pursuant to subparagraph 1(*g*) of Article XII of the Agreement, and the Observation Aircraft shall thereupon depart the Territory of the Observed Party.

11 Information and briefings furnished by a Party pursuant to this Annex shall be provided in the language that is designated for that Party

in Annex B, unless the Party receiving the information or briefing otherwise agrees.

12 The Observed Party shall, upon request, provide a suitable briefing room for briefings provided for by this Annex and for use by Inspector Escorts in preparing information in connection with inspections. The Observed Party shall also provide the assistance of clerical personnel to Inspector Escorts in connection with the performance of their responsibilities under this Annex.

13 The Observed Party shall not disclose to non-Parties information about the Observation Aircraft, its equipment, or its sensors obtained pursuant to Article IX. or this Annex without the express permission of the Observing Party.

14 Upon entry into force of this Agreement, each Party shall notify to the other Party of each type and model of Observation Aircraft and sensor it intends to use for Observation Flights. Each time a Party intends to use for Observation Flights a new model of Aircraft or a new model of Sensor of agreed types, it shall notify to the other Party the model of the Aircraft or Sensor. Functional description and generic diagrams of the Aircraft, its equipment and sensors, to include all sensor components, shall be provided upon request.

15 Within a period of 30 days after notification of each type and model of Observation Aircraft and sensor pursuant to Paragraph 14, each Party shall notify to the other Party of a 7 day period during which a representative type and model of each such Observation Aircraft and/or sensor shall be available for examination. The Party whose Observation Aircraft and/or sensors are being examined shall provide adequate facilities in which to conduct the examination.

16 Examinations shall not exceed 48 hours in length without the consent of the Party whose Observation Aircraft and/or sensors are being examined.

17 The representatives of the Party conducting the examination shall be:

a identified to the Party whose Observation Aircraft and sensors are being examined in advance of the examination;

b nationals of the Party;

c accorded the inviolability and immunities enjoyed by diplomatic agents pursuant to Articles 29 and 31 of the Vienna Convention on Diplomatic Relations for the entire period of their presence in the Territory of the Party whose Observation Aircraft and sensors are being examined, and thereafter with respect to acts previously performed in the exercise of their official functions;

d accorded the same treatment as is accorded to Aircrew Members and Inspection Crew Members under paragraph 2, of Article XIX. of the Agreement regarding waiver of immunity, and under paragraphs 3 and 4 of Article XIX. of the Agreement;

e governed by the provisions of paragraphs 1, 3-8, and 12 of this Annex to the extent that those paragraphs are applicable to Inspection Team members;

f accompanied during the examination by representatives of the Party whose Observation Aircraft and sensors are being examined; and

g required to identify specific inspection equipment, and, if requested by the Party whose Observation Aircraft and sensors are being examined, shall demonstrate that such equipment will not degrade, damage, alter, or impair the normal operation of the Observation Aircraft and its sensors.

18 The Party whose Observation Aircraft and sensors are being examined shall, prior to commencement of such examination, undertake the following measures:

a brief the Party conducting the examination on all necessary safety precautions for the examination of the Observation Aircraft;

b brief the Party conducting the examination on the procedures the Party whose Observation Aircraft and sensors are being examined intends to use to allow a thorough examination;

c brief the Party conducting the examination on the configuration of the Observation Aircraft and on the location of sensors and associated equipment on the Observation Aircraft; and

d use best efforts to answer questions of the Party conducting the examination pertaining to the examination.

19 Pursuant to paragraph 17 (*e*) of this Annex, the Party conducting the examination may not open compartments on board the Observation Aircraft, remove aircraft, sensor, or equipment panels, or remove physical barriers to access to the Observation Aircraft, its equipment, or its sensors; provided, however, that the Party whose Observation Aircraft and sensors are being examined shall, upon request, do all such opening or removal, to the extent that the compartments, panels, and barriers in question are designed to be opened, removed, and re-emplaced.

Annex D — Flight Monitors

1 Obligation of the Parties

Each Party shall facilitate the mission of the Flight Monitors.

2 Purposes of the Flight Monitors

The purposes of having Flight Monitors aboard the Observation Aircraft during the Observation Flight are:

a To represent the Observed Party;

b To monitor compliance by the Observing Party with the provisions of the Agreement;

c To ensure compliance with the Flight Plan;

d To monitor the operation of the sensors and other equipment of the Observation Aircraft;

e To advise on national rules of the Observed Party (e.g., rules on flight safety) as requested by the Observing Party;

f In the event of an emergency, to facilitate communications as directed by the pilot in command of the Observation Aircraft.

3 General Rules for the Conduct of Flight Monitors

a Two Flight Monitors shall have the right to board the Observation Aircraft at the Point of Entry and to remain aboard during the Observation Flight, including any stops for refuelling or emergencies.

b The Flight Monitors shall have the right to bring aboard the Observation Aircraft maps, flight charts, publications, equipment operating manuals, and other equipment, such as tape voice recorders.

c Except for flight safety reasons, the Flight Monitors shall have the right to move unencumbered about the Observation Aircraft, including the flight deck. In exercising their rights, the Flight Monitors shall not interfere with the activities of the Aircrew Members.

d The Flight Monitors shall have the right to view the operation of the sensors by the Observing Party as well as all activities on the flight deck during the Observation Flight. This includes the right to listen to the communication of the Observation Aircraft (internal and external) and to monitor the flight and navigation instruments of the Observation Aircraft.

e The Flight Monitors are the representatives of the Observed Party during the conduct of the Observation Flight. Flight Monitors may offer advice, communicate with air traffic controllers as appropriate, and may help relay and interpret communications, from the air traffic controllers to the Aircrew Members, about the conduct of the Observation Flight. For this purpose, the Flight Monitors shall be given access to the radio equipment of the Observation Aircraft.

f Flight Monitors are responsible for knowing the position of the Observation Aircraft and the location of Hazardous Airspace along and near the route of the Observation Flight. If a Flight Monitor or air traffic control personnel of the Observed Party believes that the Observation

Aircraft is deviating from its Flight Plan, the Aircrew Members shall be advised.

g Should the Flight Monitors determine that they are not being permitted to exercise their rights under the Agreement, the Observed Party shall forward a report specifying the nature of the issue to the Joint Open Skies Consultative Commission for consideration.

Annex E — Sensors

1 The sensor package for Open Skies purposes may comprise any of the following types of sensors in any number and combination:

a Camera, Optical

b Video Camera

2 Hungarian-Romanian Open Skies Consultative Commission shall annually consider updates to this Annex.

3 Signals intelligence collection from the Observation Aircraft is prohibited. Any device that can collect, process, retransmit, and/or record electronic signals related to communications, instrumentation, telemetry, and electronic non-communication signals is prohibited, except: (*a*) that equipment required for navigation and flight operations, and (*b*) those devices that are components of other sensors (e.g. recording equipment for onboard non-prohibited sensors). Such excepted equipment and devices shall not be used to perform any prohibited function.

4 Data link (encrypted/unencrypted) equipment, such as that which could be used to transmit sensor data from the Observation Aircraft to a ground station, to other aircraft or to satellites, is prohibited.

Annex F — Commission

1 The Commission shall undertake such action as is provided for in Article XVI. of the Agreement.

2 Each Party shall appoint a Representative, assisted by such staff as that Party deems necessary, to the Commission.

3 The Commission shall hold one regular session per calendar year unless it decides otherwise. Special sessions may be convened upon the request by a Party. Such a Party shall inform the other Party in advance of the matters to be submitted for consideration.

4 The initial session of the Commission shall be held within sixty days of the entry into force of this Agreement. Thereafter, sessions of the Commission shall be held at the capitals of the Parties, and shall alternate between the two capitals every year. The Party at whose capital

a session is held shall provide administrative support for that session. Sessions may also be held at such other places as the Parties may agree.

5 At its initial session, the Commission shall establish its Rules of Procedure.

6 The proceeding of the Commission shall be confidential. The Commission may agree to make its decisions public.

7 Each Party shall bear the expenses incurred from its participation in the Commission. Expenses incurred by the Commission as a whole shall be shared equally by the Parties.

Annex G — Hazardous Airspace

The Hazardous Airspaces of the Parties are those that are published in the AIP.

Annex H — Processing of Materials of the Observation Flights

1 Obligations of the Parties

a Each Party will in every possible way facilitate the timely and high-quality processing of the observation materials and their provision to the Observing Party.

b The Party carrying out the processing shall be responsible for the quality of the processing of the Observation Flight materials.

2 a The initial processing (development) of Observation Flight materials shall be carried out in established ground facilities to be notified by the Parties upon entry into force of the Agreement, by mixed groups of specialists of the Observed and the Observing Parties and with the aid of agreed equipment.

b Whenever it is possible to install dual sensors on board of the observation aircraft, the Observing Party shall take home one set of observation materials while the other original set of observation materials shall be retained by the Observed Party. If it is not possible to install dual sensors on board of the observation aircraft, the observation materials shall remain with the Observed Party while the copy shall be taken home by the Observing Party.

Excerpt on Nuclear Disarmament and Non-Proliferation from the French Arms Control and Disarmament Plan*

3 June 1991

I Objectives regarding individual weapons categories

3 Nuclear disarmament remains an essential goal. France supports the efforts of the two major Powers to reduce their nuclear arsenals. It confirms that it will participate in the process as soon as the conditions laid down by it in 1983 have been fulfilled.

At the same time, it is important to avoid proliferation of nuclear weapons beyond the five existing nuclear Powers.

France, which already applies all of the provisions of the Non-Proliferation Treaty, has decided in principle to sign it and hopes that all States will accede to it.

*The French arms control and disarmament plan, put forward by the President of the French Republic, was transmitted to the Secretary-General on 3 June 1991 and circulated in document A/46/212-S/22667, annex.

Final Document of the Seminar for High-Level Military and Civilian Officials*

Yaoundé, 21 June 1991

The seminar on conflict resolution, crisis prevention and management and confidence-building among the member States of the Economic Community of Central African States (ECCAS) was held at Yaoundé (Cameroon), from 17 to 21 June 1991.

I Organization of the Seminar and Activities Conducted

1 The seminar was organized by the United Nations Department for Disarmament Affairs, in conjunction with the Government of the Republic of Cameroon.

2 The seminar brought together high-level civilian and military officials from the following countries:

Burundi
Cameroon
Central African Republic
Chad
Congo
Equatorial Guinea
Gabon
Rwanda
Sao Tome and Principe
Zaire

3 The opening ceremonies on 17 June 1991 were presided over by Mr. Jacques-Roger Booh Booh, Minister for Foreign Affairs of Cameroon, who gave the welcoming address on behalf of the Government of the host country. A direction was given to the work done during the seminar by the important statements made by the Minister for Foreign Affairs of Cameroon, by Mr. Yasushi Akashi, United Nations Under-Secretary-General for Disarmament Affairs, by Mr. Melanio

*The Final Document of the Seminar, which was held within the framework of the Training Programme on Conflict Resolution, Crisis Prevention and Management and Confidence-building among the Member States of the Economic Community of Central African States (ECCAS), was circulated in document A/46/307-S/22805.

Ebendeng Nsomo, Minister of Defence of the Republic of Equatorial Guinea and representative of the current President of the Economic Community of Central African States (ECCAS), by Ambassador Kasasa Cinyante Mutati, Secretary-General of the Economic Community of Central African States.

4 The goal of the seminar-workshop was to provide information and training to high-level civilian and military officials from ECCAS member States on techniques for preventing and managing crises, and on political, economic and military steps conducive to confidence-building, transparency and the social and economic development of our countries domestically and at the subregional level. The participants considered a number of complex questions dealt with by high-level specialists, namely:

The international political, military and economic issues of the day and their relationship to peace, security, disarmament and confidence-building among African States;

The militarization of African affairs and its implications for the peace and development of the continent;

The peaceful settlement of disputes and the non-use of force: the law and the actuality;

The new international system and its implications for peace and security in Africa, with a focus on the Central African subregion;

Public administration reforms as a factor in peace and progress in Africa, with a focus on the Central African subregion;

Structural adjustment and sustained economic growth as factors in peace and progress in Africa;

The role and function of the defence committee of the Organization of African Unity.

5 A model United Nations Security Council meeting was organized on "the mandate, establishment and management of a peace-keeping force". In addition, the delegates took part in:

A "brainstorming" meeting on "democratization, human rights and peace in the African context";

A group discussion on the topics: "Should African military expenditures be reduced? If so, why and how? Central Africa as a case in point".

6 During an evaluation meeting on 20 June 1991, the participants expressed the belief that the seminar had achieved its dual goal, namely, to serve as a forum for an exchange of ideas and outlooks among the representatives, and to provide practical training in the skills and

modern techniques needed for the peaceful settlement of disputes, crisis prevention and management and confidence-building.

II Conclusions and Recommendations

The participants in the seminar-workshop on conflict resolution, crisis prevention and management and confidence-building among the member States of the Economic Community of Central African States adopted a resolution at the conclusion of their work that will be submitted to the forty-sixth session of the United Nations General Assembly. They expressed the hope that the international community would continue to give its support to the huge undertaking by the Central African States, which should result in:

The conclusion of a non-aggression pact and the adoption of legal instruments providing for a system of mutual assistance and collective defence at the subregional and regional levels;

The creation of a strategic studies centre within the framework of existing university or military training facilities in our subregion and the establishment of subregional cooperation in military training;

The organization of joint military exercises and mixed patrols;

The creation under United Nations auspices of a standing advisory committee responsible for security questions;

An expansion of each State's actual diplomatic presence in all the other countries;

A plan for reducing the military and security budgets and allocating the funds thus released to social and economic development and especially to regional and national development projects;

The establishment of hotlines between our heads of State; and

The strengthening of economic cooperation, as envisaged in the Treaty establishing the Economic Community of Central African States (ECCAS).

The participants further expressed their deep gratitude to the United Nations Department for Disarmament Affairs for its assistance in the preparation and organization of the seminar.

Paying tribute to the Secretary-General of the United Nations, the participants, in conclusion, asked him to continue to provide their countries with the advice and assistance needed to achieve the proposed aims of the action that will be taken to promote confidence-building, security and development in Central Africa.

Done at Yaoundé, 21 June 1991

Statement by President F. W. de Klerk on South African Accession to the NPT*

Pretoria, 27 June 1991

At its last meeting on 26 June 1991 before the mid-term recess, the South African Cabinet has finally approved South Africa's accession to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Accession will be effected as soon as the required constitutional and administrative arrangements have been made. To this end steps have already been initiated.

It will be recalled that my predecessor in a media statement as far back as 21 September 1987 stated, *inter alia*:

> "The Republic of South Africa is prepared to commence negotiations with each of the nuclear weapon States on the possibility of signing the Non-Proliferation Treaty. At the same time the Republic of South Africa will consider including in these negotiations safeguards on its installations subject to the NPT conditions. The nature of these negotiations will depend on the outcome of the 31st General Conference of the IAEA to be held in Vienna as from 22 September.
>
> "South Africa hopes that it will soon be able to sign the NPT and has decided to open discussions with others to this end. Any safeguards agreement which might subsequently be negotiated with the IAEA would naturally be along the same lines as, and in conformity with, agreements with other NPT signatories."

Since then major events in Central and Eastern Europe have changed the world order dramatically. The cold war has subsided. The last Cuban troops have withdrawn from Angola, a month ahead of schedule. The threat of a conventional military conflict in the southern African region involving super-Power rivalry has diminished substantially. World wide there has been a growing acceptance of a commitment to the peaceful resolution of regional conflicts. Following numerous discussions with the three Depository States, the United States of America, the Union of Soviet Socialist Republics and the United Kingdom of Great Britain and Northern Ireland, and other interested parties the South African Government indicated in September 1990 its

*A/46/302, annex. The press release was issued at New York on 1 July 1991.

willingness to accede to the Treaty in the context of a nuclear-free zone in southern Africa.

Recent positive developments in the region, including the accession to the NPT by Zambia and the United Republic of Tanzania, have further enhanced the environment for peace and security. South Africa welcomes these accessions.

We are therefore hopeful that these developments, including South Africa's own accession to the Treaty, will now make it possible to achieve the longstanding goal of a nuclear-weapon-free zone in southern Africa.

South Africa's position in the international community has changed so fundamentally that the process of normalizing its international position has now become irreversible. Its own accession to the Non-Proliferation Treaty also reaffirms its commitment not only to take its rightful place in the international community but also to play a positive and constructive role in the process.

South Africa has established an advanced nuclear technology base and nuclear industry. Accession to the NPT will facilitate the international exchange of nuclear technology which is not only important for the maintenance and further development of South Africa's own nuclear programme, but will also be to the benefit of its neighbouring States and the international nuclear community.

European Council Declaration on Non-Proliferation and Arms Exports*

29 June 1991

The European Council is deeply concerned at the danger arising from the proliferation of weapons of mass destruction throughout the world. The recent Gulf War showed the absolute necessity of further enhancing the effectiveness of regimes of non-proliferation.

The Community and its member States support a strengthening of the regime of nuclear non-proliferation and call for all States to become parties to the Non-Proliferation Treaty. They look to an agreement in the near future on a convention on chemical weapons and to the strengthening of the Convention on Biological and Bacteriological Weapons.

The European Council is also alarmed by the stockpiling of conventional weapons in certain regions of the world. To prevent situations of instability recurring in entire regions as a result of such over-armament, the European Council believes that far-reaching international action is needed immediately to promote restraint and transparency in the transfers of conventional weapons and of technologies for military use, in particular towards areas of tension.

The European Council notes with satisfaction that work in progress in the organs of European political cooperation has already, by comparing national policies on arms exports, identified a number of common criteria on which these policies are based, such as:

—Respect for the international commitments of the member States of the Community, in particular the sanctions decreed by the Security Council of the United Nations and those decreed by the Community, agreements on non-proliferation and other subjects, as well as other international obligations;

—Respect of human rights in the country of final destination;

—The internal situation in the country of final destination, as a function of the existence of tensions or internal armed conflicts;

—Preservation of regional peace, security and stability;

—National security of the member States and of territories whose

*A/46/289, annex.

external relations are the responsibility of a member State, as well as that of friendly and allied countries;

—Behaviour of the buyer country with regard to the international community, as regards in particular its attitude to terrorism, the nature of its alliances, and respect for international law;

—The existence of a risk that the equipment will be diverted within the buyer country or re-exported under undesirable conditions.

In the perspective of political union, the European Council hopes that on the basis of criteria of this nature a common approach will be made possible leading to a harmonization of national policies.

The Community and its member States attach particular importance in the framework of their internal consultations and within the competent international forums to transparency in conventional arms transfers. They will attach priority to the establishment of a United Nations register on conventional arms transfers and will table a draft resolution in this sense at the next United Nations General Assembly.

The European Council calls on all States to support this initiative and others which aim to prevent the uncontrolled spread of weapons and military technologies.

Communiqué of the Political Consultative Committee of the Warsaw Treaty Member States and Protocol Signed*

Prague, 1 July 1991

Communique

The Political Consultative Committee of the Warsaw Treaty Member States held a session in Prague on July 1, 1991. Present at the talks were:

For the Republic of Bulgaria—Zhelyu Zhelev, President of the Republic of Bulgaria; Dimitri Popov, Chairman of the Council of Ministers of the Republic of Bulgaria; Viktor Valkov, Deputy Chairman of the Council of Ministers and Minister of Foreign Affairs of the Republic of Bulgaria.

For the Republic of Hungary—Joszef Antall, Prime Minister of the Republic of Hungary; Geza Jeszenszki, Minister of Foreign Affairs of the Republic of Hungary; Ferenc Somogyi, State Secretary of the Ministry of Foreign Affairs of the Republic of Hungary.

For the Republic of Poland—Lech Walesa, President of the Republic of Poland; Jan Krzysztof Bielecki, Chairman of the Council of Ministers of the Republic of Poland; Krzysztof Skubiszewski, Minister of Foreign Affairs of the Republic of Poland.

For Romania—Ion Iliescu, President of Romania; Petre Roman, Prime Minister of Romania; Adrian Nastase, Minister of Foreign Affairs of Romania.

For the Union of Soviet Socialist Republics—G.I. Yanayev, Vice-President of the USSR; A.A. Bessmertnykh, Minister of Foreign Affairs of the USSR.

For the Czech and Slovak Federal Republic—Václav Havel, President of the Czech and Slovak Federal Republic; Marián Calfa, Prime Minister of the Czech and Slovak Federal Republic; Jiri Dienstbier, Deputy Prime Minister and Minister of Foreign Affairs of the Czech and Slovak Federal Republic.

A Protocol on terminating the validity of the Treaty of

* A/46/300-S/22782, annex I (communiqué) and annex II (Protocol).

Friendship, Cooperation and Mutual Assistance, signed in Warsaw on May 14, 1955, and of the Protocol extending the validity of the mentioned treaty of April 26, 1985, were [*sic*] signed at the session. The document signed at the session is subject to ratification.

The participants of the session proclaimed the following:

They agreed the present situation in Europe is endowed with qualitatively new relations of good neighborliness, partner-ship, mutual respect and friendly cooperation among the equal and sovereign states represented at the session.

Proceeding from the above-mentioned, they support the development of relations in all areas on a renewed bilateral contractual-and-legal basis.

They voiced support for the further development of the all European process in the interest of creating new structures of security and cooperation on the continent in accordance with the results achieved at the CSCE summit in November, 1990, and they promoted the formation of an all-European framework of cooperation in the areas of security, economics, law, culture, ecology, and the humanitarian sphere, as it was stated in the Paris Charter for a New Europe.

According to the identical views expressed by the States represented at the session—stability, prosperity and the further development of democracy based on respect for human rights and fundamental freedoms in the countries of central and eastern Europe are in the interest of all participating states of the CSCE process.

The participants of the session expressed the readiness of their countries to hold, in the event of any such interest, bilateral or multilateral consultations on ad hoc basis, on topical issues of common interest including issues linked with the fulfilment of the Treaty on Conventional Armed Forces in Europe.

They confirmed the provisions included in the Proclamation of the member states of the Warsaw Treaty approved at the extraordinary session of the Political Consultative Committee in Budapest, on February 25, 1991.

Protocol

on terminating the validity of the Treaty of Friendship, Cooperation and Mutual Assistance, signed in Warsaw on May 14, 1955, and of the Protocol on extending its validity, signed in Warsaw on April 26, 1985.

The States—parties to the Treaty of Friendship, Cooperation and Mutual Assistance, signed in Warsaw on May 14, 1955,

bearing in mind the profound changes currently underway in

Europe, which are bringing to an end the era of confrontation and division of the continent,

resolved to actively develop, in the new situation, their relations on a bilateral and, if interested, on a multilateral basis,

recalling the significance of the Joint Declaration of twenty-two states, which signed the Treaty on Conventional Armed Forces in Europe, and which declared that they are no longer enemies, and that they will build new relations of partnership and cooperation,

resolved to promote gradual transition to all-European security structures, in the spirit of the arrangements made at the Paris summit of the Conference on Security and Cooperation in Europe in November, 1990,

have agreed as follows:

Article 1

The Treaty of Friendship, Cooperation and Mutual Assistance, signed in Warsaw on May 14, 1955 (henceforth referred to only as the Warsaw Treaty), and the Protocol extending the validity of the Treaty of Friendship, Cooperation and Mutual Assistance, signed in Warsaw on April 26, 1985, will cease to be valid on the day this Protocol enters into force.

Article 2

The Parties to this Protocol declare they claim no property towards one another, arising from the Warsaw Treaty.

Article 3

1 This protocol is subject to ratification

2 The original of the Protocol and the ratification instruments will be retained in the archives of the government of the Czech and Slovak Federal Republic. The government of the Czech and Slovak Federal Republic will inform the other Parties to this Protocol on depositing every ratification instrument.

Article 4

The Protocol will enter into force on the day when the last ratification instrument is deposited in the archives.

Done in Prague on July 1, 1991, in one copy in each of the Czech, Bulgarian, Hungarian, Polish, Romanian and Russian languages, with all versions having equal validity. The authorized copies of this Protocol

will be given by the government of the Czech and Slovak Federal Republic to all other Parties to this Protocol.

For the Czech and Slovak Federal Republic
Václav Havel
President of the Czech and Slovak
Federal Republic

For the Republic of Bulgaria
Zhelyu Zhelev
President of the Republic of Bulgaria

For the Republic of Hungary
Jozsef Antall
Prime Minister of the Republic of Hungary

For the Republic of Poland
Lech Walesa
President of the Republic of Poland

For Romania
Ion Iliescu
President of Romania

For the Union of Soviet Socialist Republics
G.I. Yanayev
Vice-President of the Union of
Soviet Socialist Republics

Communiqué from Paris Meeting of Five on Arms Transfers and Non-Proliferation*

Paris, 8-9 July 1991

1 Representatives of the United States of America, the People's Republic of China, France, the United Kingdom, and the Union of Soviet Socialist Republics met in Paris on the 8th and 9th of July to review issues related to conventional arms transfers and to the non-proliferation of weapons of mass destruction.

They noted with concern the dangers associated with the excessive build-up of military capabilities, and confirmed they would not transfer conventional weapons in circumstances which would undermine stability. They also noted the threats to peace and stability posed by the proliferation of nuclear weapons, chemical and biological weapons, and missiles, and undertook to seek effective measures of non-proliferation and arms control in a fair, reasonable, comprehensive and balanced manner on a global as well as on a regional basis.

2 They had a thorough and positive exchange of views on the basis of the arms control initiatives presented in particular by President Bush, President Mitterrand, Prime Minister Major and on other initiatives which address these problems globally and as a matter of urgency in the Middle East. They also agreed to support continued work in the United Nations on an arms transfers register to be established under the aegis of the UN Secretary-General, on a non-discriminatory basis, as a step towards increased transparency on arms transfers and in general in military matters.

They stressed that the ultimate response to the threat of proliferation is verifiable arms control and disarmament agreements amongst the parties concerned. They expressed strong support for full implementation of existing arms control regimes. For their part, they will contribute to this objective by developing and maintaining stringent national and, as far as possible, harmonized controls to ensure that weapons of mass-destruction related equipments and materials are transferred for permitted purposes only and are not diverted.

They also strongly supported the objective of establishing a

*As issued by the five permanent members of the United Nations Security Council following their meeting in Paris.

weapons of mass destruction-free zone in the Middle East. They expressed their view that critical steps toward this goal include full implementation of UNSC resolution 687 and adoption by countries in the region of a comprehensive program of arms control for the region, including:

—A freeze and ultimate elimination of ground to ground missiles in the region;

—Submission by all nations in the region of all of their nuclear activities to IAEA safeguards;

—A ban on the importation and production of nuclear weapons usable materials;

—Agreements by all States in the region to undertake to becoming parties to the CW Convention as soon as it is concluded in 1992.

3 They acknowledged that article 51 of the UN Charter guarantees every State the right to self-defense. That right implies that States have also the right to acquire means with which to defend themselves. In this respect, the transfer of conventional weapons, conducted in a responsible manner, should contribute to the ability of States to meet their legitimate defense, security and national sovereignty requirements and to participate effectively in collective measures requested by the United Nations for the purpose of maintaining or restoring international peace and security.

They recognized that indiscriminate transfers of military weapons and technology contribute to regional instability. They are fully conscious of the special responsibilities that are incumbent upon them to ensure that such risks be avoided, and of the special role they have to play in promoting greater responsibility, confidence and transparency in this field. They also recognize that a long term solution to this problem should be found in close consultation with recipient countries.

4 They expressed the intention that:

—When considering under their national control procedures conventional weapons transfers, they will observe rules of restraint. They will develop agreed guidelines on this basis;

—Taking into account the special situation of the Middle East as a primary area of tension, they will develop modalities of consultation and of information exchanges concerning arms transfers to this region as a matter of priority;

—A group of experts will meet in September with a view to reaching agreement on this approach;

—Another plenary meeting will be held in October in London;

Further meetings will be held periodically to review these issues.

5 They expressed the conviction that this process of continuing cooperation will contribute to a worldwide climate of vigilance in this field which other countries will share.

Economic Summit Declaration on Conventional Arms Transfers and NBC Non-Proliferation*

London, 15-17 July 1991

1 At our meeting in Houston last year, we, the Heads of State and Government and the representatives of the European Community, underlined the threats to international security posed by the proliferation of nuclear, biological and chemical weapons and of associated missile delivery systems. The Gulf crisis has highlighted the dangers posed by the unchecked spread of these weapons and by excessive holdings of conventional weapons. The responsibility to prevent the re-emergence of such dangers is to be shared by both arms suppliers and recipient countries as well as the international community as a whole. As is clear from the various initiatives which several of us have proposed jointly and individually, we are each determined to tackle, in appropriate fora, these dangers both in the Middle East and elsewhere.

Conventional Arms Transfers

2 We accept that many states depend on arms imports to assure a reasonable level of security and the inherent right of self-defence is recognised in the United Nations Charter. Tensions will persist in international relations so long as underlying conflicts of interest are not tackled and resolved. But the Gulf conflict showed the way in which peace and stability can be undermined when a country is able to acquire a massive arsenal that goes far beyond the needs of self defence and threatens its neighbours. We are determined to ensure such abuse should not happen again. We believe that progress can be made if all states apply the three principles of transparency, consultation and action.

3 The principle of *transparency* should be extended to international transfers of conventional weapons and associated military technology. As a step in this direction we support the proposal for a universal register of arms transfers under the auspices of the United Nations, and will work for its early adoption. Such a register would alert the international community to an attempt by a state to build up holdings of conventional weapons beyond a reasonable level. Information should

*A/46/309-S/22807, annex III.

be provided by all states on a regular basis after transfers have taken place. We also urge greater openness about overall holdings of conventional weapons. We believe the provision of such data, and a procedure for seeking clarification, would be a valuable confidence and security building measure.

4 The principle of *consultation* should now be strengthened through the rapid implementation of recent initiatives for discussions among leading arms exporters with the aim of agreeing a common approach to the guidelines which are applied in the transfer of conventional weapons. We welcome the recent opening of discussions on this subject. These include the encouraging talks in Paris among the Permanent Members of the United Nations Security Council on 8/9 July; as well as ongoing discussions within the framework of the European Community and its Member States. Each of us will continue to play a constructive part in this important process, in these and other appropriate fora.

5 The principle of *action* requires all of us to take steps to prevent the building up of disproportionate arsenals. To that end all countries should refrain from arms transfers which would be destabilising or would exacerbate existing tensions. Special restraint should be exercised in the transfer of advanced technology weapons and in sales to countries and areas of particular concern. A special effort should be made to define sensitive items and production capacity for advanced weapons, to the transfer of which similar restraints could be applied. All states should take steps to ensure that these criteria are strictly enforced. We intend to give these issues our continuing close attention.

6 Iraqi aggression and the ensuing Gulf war illustrate the huge costs to the international community of military conflict. We believe that moderation in the level of military expenditure is a key aspect of sound economic policy and good government. While all countries are struggling with competing claims on scarce resources, excessive spending on arms of all kinds diverts resources from the overriding need to tackle economic development. It can also build up large debts without creating the means by which these may be serviced. We note with favour the recent report issued by the United Nations Development Programme (UNDP) and the recent decisions by several donor countries to take account of military expenditure where it is disproportionate when setting up aid programmes and encourage all other donor countries to take similar action. We welcome the attention which the Managing Director of the International Monetary Fund (IMF) and the President of the

World Bank have recently given to excessive military spending, in the context of reducing unproductive public expenditure.

Non-Proliferation

7 We are deeply concerned about the proliferation of nuclear, biological and chemical weapons and missile delivery systems. We are determined to combat this menace by strengthening and expanding the non-proliferation regimes.

8 Iraq must fully abide by Security Council Resolution 687, which sets out requirements for the destruction, removal or rendering harmless under international supervision of its nuclear, biological, and chemical warfare and missile capabilities; as well as for verification and long-term monitoring to ensure that Iraq's capability for such weapon systems is not developed in the future. Consistent with the relevant UN resolutions, we will provide every assistance to the United Nations Special Commission and the International Atomic Energy Agency (IAEA) so that they can fully carry out their tasks.

9 In the nuclear field, we:

—Re-affirm our will to work to establish the widest possible consensus in favour of an equitable and stable non-proliferation regime based on a balance between nuclear non-proliferation and the development of peaceful uses of nuclear energy;

—Reaffirm the importance of the nuclear Non-Proliferation Treaty (NPT) and call on all other non-signatory states to subscribe to this agreement;

—Call on all non-nuclear weapon states to submit all their nuclear activities to IAEA safeguards, which are the cornerstone of the international non-proliferation regime;

—Urge all supplier states to adopt and implement the Nuclear Suppliers Group guidelines.

We welcome the decision of Brazil and Argentina to conclude a full-scope safeguard agreement with the IAEA and to take steps to bring the Treaty of Tlatelolco into force, as well as the accession of South Africa to the NPT.

10 Each of us will also work to achieve:

—Our common purpose of maintaining and reinforcing the NPT regime beyond 1995;

—A strengthened and improved IAEA safeguards system;

—New measures in the Nuclear Suppliers Group to ensure adequate export controls on dual-use items.

11 We anticipate that the Biological Weapons Review Conference in September will succeed in strengthening implementation of the convention's existing provisions by reinforcing and extending its confidence-building measures and exploring the scope for effective verification measures. Each of us will encourage accession to the convention by other states and urge all parties strictly to fulfil their obligations under the convention. We each believe that a successful Review Conference leading to strengthened implementation of the BWC would make an important contribution to preventing the proliferation of biological weapons.

12 The successful negotiation of a strong, comprehensive, and effectively verifiable convention banning chemical weapons, to which all states subscribe, is the best way to prevent the spread of chemical weapons. We welcome recent announcements by the United States which we believe will contribute to the swift conclusion of such a convention. We hope that the negotiation will be successfully concluded as soon as possible. We reaffirm our intention to become original parties to the convention. We urge others to become parties at the earliest opportunity so that it can enter into force as soon as possible.

13 We must also strengthen controls on exports which could contribute to the proliferation of biological and chemical weapons. We welcome the measures taken by members of the Australia Group and by other states on the control of exports of chemical weapons precursors and related equipment. We seek to achieve increasingly close convergence of practice between all exporting states. We urge all states to support these efforts.

14 Our aim is a total and effective ban on chemical and biological weapons. Use of such weapons is an outrage against humanity. In the event that a state uses such weapons each of us agrees to give immediate consideration to imposing severe measures against it both in the UN Security Council and elsewhere.

15 The spread of missile delivery systems has added a new dimension of instability to international security in many regions of the world. As the founders of the Missile Technology Control Regime (MTCR), we welcome its extension to many other states in the last two years. We endorse the joint appeal issued at the Tokyo MTCR meeting in March 1991 for all countries to adopt these guidelines. These are not intended to inhibit cooperation in the use of space for peaceful and scientific purposes.

16 We can make an important contribution to reducing the dangers of proliferation and conventional arms transfers. Our efforts and con-

sultations on these issues, including with other supplier countries, will be continued in all appropriate fora so as to establish a new climate of global restraint. We will only succeed if others, including recipient countries, support us and if the international community unites in a new effort to remove these threats which can imperil the safety of all our peoples.

Democratic People's Republic of Korea and the International Atomic Energy Agency Secretariat Complete Safeguards Agreement Text*

16 July 1991

Representatives of the Democratic People's Republic of Korea (DPRK) and the secretariat of the International Atomic Energy Agency (IAEA) today agreed to the text of a draft safeguards agreement permitting inspection of nuclear material in the DPRK.

The draft agreement, which follows the standard pattern of safeguards agreements signed between parties to the Non-Proliferation Treaty and the IAEA, was drawn up in its final form during discussions held in Vienna, July 12-16.

The agreement will be submitted to the meeting of the IAEA Board of Governors to be held in Vienna on September 11, 1991 for approval.

The DPRK side was led by Mr. Chang Mun Son, Director of the Legal Affairs Department of the DPRK Foreign Ministry.

*Press release PR 91/23 issued by IAEA.

Recent Books and Articles

Amundsen, Kirsten. *Soviet Strategic Interests in the North*. New York, St. Martin's Press, 1990. 153 p.

Why does the Soviet Union continue to operate extensively in Swedish waters in the post-cold-war era? The author discounts conventional wisdom, which says that it sees Scandinavia as a stepping-stone to the West and seeks to make sense of this phenomena. She examines the recent build-up of Soviet forces on the Kola peninsula, and then analyses Soviet military doctrine, the Nordic countries' policies and strategies, the consequent security dilemma and prospects for espionage. In a concluding chapter she re-examines Soviet "new thinking".

Arkin, William M., Damian Durrant, and Marianne Cherni. *On Impact: Modern Warfare and the Environment; A Case Study of the Gulf War*. Washington, D.C., Greenpeace, 1991. 171 p.

This study, remarkably quickly put together by its authors, deals mainly with weapons and weapons systems used in the Persian Gulf war, particularly by the coalition parties. It also deals with the conduct in general of both sides, but particularly of Iraq, that constitutes, according to the authors, grave breaches of both international law applicable in war and international law relating to human rights. With regard to environmental destruction as a method of warfare, reference is made primarily to general principles of customary international humanitarian law. References are also made to provisions in conventional international law of war relating specifically to environmental destruction, which are binding only on parties. Iraq and important coalition members are not parties to the instruments that include these provisions. Although more broadly descriptive of the destruction and suffering brought about by the war than its title suggests, this study nevertheless draws attention to the need for a serious review of the state of international law applicable to environmental destruction as a method of warfare.

Aspen Strategy Group, *New Threats: Responding to the Proliferation of Nuclear, Chemical and Delivery Capabilities in the Third World*. Boston, University Press of America, 1990. 273 p.

This report of the Aspen Strategy Group, a bipartisan committee organized under the auspices of the Aspen Institute, is the result of a policy workshop held 13-18 August 1989 and attended by prominent members of the United States policy, academic and business communities. The report is organized into four chapters which examine proliferation in a global context, the creation and maintenance of international regimes designed to limit proliferation, including the non-proliferation Treaty and the Missile Technology Control Regime (MTCR), proliferation in the Middle Eastern and South Asian regional contexts, and finally recommendations for United States policy.

The four chapters are followed by nine appendices, in which leading authorities on proliferation examine specific issues in greater detail and provide associated policy recommendations. Contributors include Leonard Spector, Elisa Harris, Janne Nolan, Albert Wheelon, Kyle Olson, Paul Doty, Stephen Cohen, Geoffrey Kemp, Lewis Dunn and Thomas Graham.

Brock-Utne, Birgit. *Feminist Perspectives on Peace and Peace Education*. New York, Pergamon Press, 1989. 199 p.

This work is intended to supplement the author's earlier book, *Educating for Peace: A Feminist Perspective*, published in 1985. Whereas the earlier volume addresses women's work for peace and women and peace movements, the latter volume focuses on women and peace research. The present book examines a number of feminist perspectives and then addresses the subject of peace education, considering both the non-formal (i.e., family) and formal (i.e., classroom) sectors.

A comprehensive list of English and non-English language references is included at the end of the volume.

Calingaert, Daniel. *Soviet Nuclear Policy under Gorbachev: A Policy of Disarmament*. New York, Praeger, 1991. 181 p.

Drawing heavily on Soviet sources, the book examines the domestic, political, economic, security, military and diplomatic aspects of arms control policy under Gorbachev. It explores how the pursuit of

arms limitation—SALT—is being replaced by arms reduction—START.

The author notes that the Soviet Union has altered its approach to arms control "to promote its fundamental aim of modernizing the Soviet system and transforming the USSR's role in world affairs".

Cerutti, Furio, and Rodolfo Ragionieri, eds. *Rethinking European Security*. Crane Russak for the Forum on the Problems of Peace and War, 1990. 182 p.

The book contains the proceedings of the International Conference on Rethinking European Security, held in Florence, Italy, 24-25 September 1988. The Conference examined the question of political theory and security in general and as its relates to Europe, devoted some time to a critical analysis of defensive defence, including its relevance to the Mediterranean region—an area which many participants felt had too often been neglected in the scheme of European security.

Cowen Karp, Regina, ed. *Security with Nuclear Weapons? Different Perspectives on National Security*. New York, Oxford University Press for the Stockholm International Peace Research Institute (SIPRI), 1991. 396 p.

"Security without nuclear weapons" is a three-year research project launched by SIPRI, which seeks to investigate what is necessary to create a nuclear-weapon-free, or nearly-free, world. The above volume, which is the first of two being produced by the research project, explores the evolution of thinking about nuclear weapons and the role these weapons play in national security planning. The similarities and differences in approach to nuclear weapons by nuclear, non-nuclear and threshold States are also analysed. The articles of the 15 contributing authors reflect the dramatic political changes in Europe and between the super-Powers.

While the volume *Security with Nuclear Weapons?* focuses on how nuclear weapons and their existence have shaped the way of thinking on these weapons, the forthcoming volume will focus on what States and their policy makers must do to make the elimination of nuclear weapons feasible.

Da Cunha, Derek. *Soviet Naval Power in the Pacific*. Boulder, Colorado, Lynne Rienner Publishers for the Institute of Southeast Asian Studies (Singapore), 1990. 284 p.

The author addresses the rationale behind the build-up of Soviet naval forces in the Pacific since the late 1970s. He attributes the growth of the Soviet Pacific Fleet to a series of strategic nuclear, geopolitical and conventional warfare considerations. Da Cunha outlines the great-Power naval forces facing the Soviet build-up, the state of the Soviet-Vietnamese naval relationship and, in particular, the implications of the Soviet base in Cam Ranh Bay *vis-à-vis* the ASEAN States. The author underscores the current modernization of the Soviet Pacific Fleet, as priorities shift from numerical superiority to high technology for conventional war-fighting. He believes that the resulting decreased size, but enhanced strength of its force structure, together with the underestimated geographical advantages, will provide the Pacific Fleet with the potential to turn a defensive battle against United States forces in the northwest Pacific to its advantage.

Forcey, Linda Rennie, ed. *Peace: Meanings, Politics, Strategies*. New York, Praeger, 1989. 242 p.

This volume, edited by Linda Rennie Forcey, an associate professor at the State University of New York at Binghamton, explores the meaning of peace, including political approaches and strategies for better understanding and change. The book is comprised of 16 chapters written by scholars of sociology, history, psychology, political science, and several interdisciplinary fields. The philosophical, ideological and pedagogical questions which the contributors pose stimulate thought regarding the complex interrelationship of the personal and systemic dimensions of peace.

Fried, John H.E. "The United Nations' effort to establish a right of the peoples to peace", *Peace Yearbook of International Law*, 1990. pp. 21-66.

This essay by John Fried provides a learned juridical commentary on the General Assembly's 1984 Declaration of the Right of Peoples to Peace, by which it proclaimed that the peoples of the world have a sacred right to peace and that the preservation of that right constituted a fundamental obligation of each State; and appealed to all States and

international organizations to do their utmost to assist in implementing that right at both the national and the international level.

In his inquiry, the author raises some fundamental questions: What is peace? Does a universal right to peace exist? Do peoples' rights differ from individual human rights? Does the right of peoples to peace include a right to security? Does the right to peace exclude the right to make war? Concerning the last question, the author emphasizes that the right to peace is accompanied by "a carefully circumscribed right of States" to use military force in self-defence. The United Nations proclamation, he concludes, is not a blueprint for the settlement of military conflicts nor a programme for arms reductions. Yet, the dynamic notion of the peoples' right to peace can become a source of initiatives on peace and disarmament.

Guilhaudis, J.-F., ed. *Course aux armements & Désarmement*. Grenoble, 1991. 220 p.

This is volume XII (1990-1991) of *Arès*, a publication of the Société pour le Développment des Etudes de Défense et de Sécurité Internationale. It provides basic documentation about armaments and disarmament in 1989; some articles on negotiations in Europe, including the negotiations on conventional armed forces, which culminated in the 1990 CFE Treaty, and on other negotiations, both bilateral and multilateral; and an essay on French disarmament policy.

Hassard, John, Tom Kibble and Patricia Lewis, eds. *Ways Out of the Arms Race: From the Nuclear Threat to Mutual Security*. Singapore, World Scientific Publishing Co. Pte. Ltd., 1989. 373 p.

The book contains the proceedings of the Second International Scientists' Congress held at the Imperial College of Science, Technology and Medicine, at the University of London from 2-4 December 1988. The Congress' first session was held in Hamburg two years earlier. Tom Kibble, Chairman of Scientists against Nuclear Arms, writes that the aim of the Congress is "to find ways out of the arms race not only because it is directly leading [mankind] to the edge of the abyss, but because it is sapping [man's] power to deal with the real menace".

James, Alan. *Peacekeeping in International Politics*. New York, St. Martin's Press, 1990. 378 p.

While peacekeeping is generally associated with the United

Nations (which was awarded the Nobel Peace Prize in 1988 in recognition of its efforts in this regard), it is not the only vehicle used to manage or resolve conflict. In this study, Alan James reviews some 75 cases dating from 1919 to 1989, in which third parties have served in such capacities. He has grouped these cases into five categories based on the protagonists' circumstances and capabilities and on the desires and power of those States seeking to intervene. An extensive use of maps, the placement of each case in its political and historical context, and a listing of suggested future readings all serve to enhance the author's treatment of the subject matter.

Joenniemi, Pertti, ed. *Co-operation in the Baltic Sea Region: Needs and Prospects*. Tampere, Finland, Tampere Peace Research Institute, 1991. 169 p. (Research Report No. 42)

The book is a collection of papers by scholars from different institutes and countries who are studying Baltic problems in a regional perspective as part of a broad three-year project entitled "Baltic region under formation". These papers were presented to a Baltic seminar held in Turku, Finland, and jointly organized by the Tampere Peace Research Institute and the Peace Research Unit Kiel. It is the second report on the Baltic region presented by Tampere; the first, on the Aland Islands, was published in 1988.

In an endeavour to generate new thinking in the area of Baltic Sea regional cooperation, the authors focus on recent changes in Europe and the role that the Baltic Sea region could play in shaping post-cold-war Europe. Among the topics discussed at the seminar were: environmental security and the Baltic Sea region, establishment of a nuclear-weapon-free zone in the Baltic, and a conceptual approach to conversion, peace research and cooperation in the region. The editor examines possible new policies for attaining reforms to stimulate regionalization in the Baltic Sea area, and the actors involved in that process.

Laqueur, Walter, and Leon Sloss. *European Security in the 1990s: Deterrence and Defense after the INF Treaty*. New York, Plenum Press, 1990. 214 p.

The two authors address a number of questions concerning European defence, presenting their analysis in three chapters. The first chapter pays particular attention to economic and demographic trends and to the attitudes of the public and political elites in the major

countries in Western Europe. The viability of alternative defence concepts and the future success of the existing strategy are addressed in the second chapter. The future roles of theatre nuclear weapons in the light of changing strategic concepts and evolving political economic, military and technological factors is the prominent focus of the final chapter. An appendix consisting of an extensive collection of documents relating to the North Atlantic Treaty Organization (NATO), European security and cooperation, and various arms control and disarmament measures complements the analysis and comprises roughly half the book.

European Security in the 1990s is the second book in a series edited by Robert E. Pendley and Joseph F. Pilat entitled, "Issues in International Security".

Lynn-Jones, Sean M., ed. *The Cold War and After: Prospects for Peace*. Cambridge, Massachusetts, MIT Press, 1991. 251 p.

What explains the peaceful co-existence European States have experienced since the end of the Second World War, and what effect will the end of the cold war have on this peace? This is the question which the collection of essays addresses in this recent volume of the *International Security Reader* series, edited by Sean M. Lynn-Jones.

Contributors include John Lewis Gaddis, who explores the reasons why the super-Powers kept the cold war from becoming a shooting war in his essay "The long peace"; John Mueller, who argues that nuclear weapons have been only one source of enhanced stability in the post-war world in his essay "The essential irrelevance of nuclear weapons"; Jack Snyder, who examines the impact of the transformation of Central and Eastern Europe in his essay "Averting anarchy in the new Europe"; and John Mearsheimer, who presents a pessimistic vision of Europe's future in his essay "Back to the future". The volume includes an annotated bibliography to assist those interested in further study of the subject.

Milivojevic, Marko and Pierre Maurer, eds. *Swiss Neutrality and Security: Armed Forces, National Defence and Foreign Policy*. New York, St. Martin's Press, 1990. 258 p.

The book is a collection of 14 original papers, largely written by prominent Swiss academics and policy makers, which examine Switzerland's armed forces, its defence and foreign policies, and the problems and prospects neutrality presents for Swiss security.

On matters relating to disarmament, two chapters, written by faculty at the University of Geneva, are particularly relevant. In his article, Fred Tanner concludes: "The Swiss government can no longer afford continued passivity in the field of arms control, given the recent dynamics in international arms control and the ensuing domestic requests to participate in this process." Besides continuing to offer its "good offices" to facilitate others' disarmament efforts, Tanner suggests that the Swiss government integrate arms control into its concept of general defence.

Switzerland's role in the CSCE (Conference on Security and Co-operation in Europe) process—specifically, the mechanism for the peaceful settlement of disputes—is the focus of a paper by Victor-Yves Ghebali.

Oelrich, Ivan. *Conventional Arms Control: The Limits and Their Verification*. Lanham, Maryland, University Press of America, Inc. for the Center for Science and International Affairs, Harvard University, 1990. 84 p. (CSIA Occasional Paper)

Ivan Oelrich, a Senior Analyst in the International Security and Commerce Program of the United States Congressional Office of Technology Assessment, examines conventional arms control and analyses the verification tools required to complement a conventional arms agreement. The paper is divided into two main chapters: the first chapter outlines the military and political objectives of a reasonable conventional arms control agreement and the provisions to meet these objectives; the second chapter focuses, most notably, on the political, as opposed to the technical or military, requirements. The author points out in the second chapter that there are essential differences between nuclear and conventional arms control verification, and that verification of conventional arms control agreements will require "different tools, methods and standards". The paper is based on work done by the author as a Sloan Foundation Fellow at the Center for Science and International Affairs at Harvard University.

Rotfeld, Adam Daniel, and Walther Stützle, eds. *Germany and Europe in Transition*. Oxford, Oxford University Press for the Stockholm International Peace Research Institute, 1991. 237 p.

The book contains the conclusions of an international confer-

ence entitled "A European Peace Order and the Responsibility of the Two German States", organized by SIPRI and the Institut für Internationale Politik und Wirtschaft der DDR (IPW), held in Potsdam on 8-10 February 1990. The conference's primary aim was twofold—to help students of international affairs to acquire a better understanding of German affairs and to give Germans a better understanding of international concerns. It was at this conference that Hans-Dietrich Genscher, then Deputy Federal Chancellor and Minister for Foreign Affairs of the Federal Republic of Germany, presented a 10-point plan for the institutionalization of the Conference on Security and Co-operation (CSCE). Included in the volume is an extensive collection of full-text agreements and other documents concerning German unification.

Sanders, Ralph. *Arms Industries: New Suppliers and Regional Security*. Washington, D.C., National Defense University Press, 1990. 198 p.

In this book the author examines the rise of defence industries in newly industrialized countries. The production capabilities of Argentina, Brazil, India, Israel, the Republic of Korea, Taiwan, province of China, and South Africa are the focus of the work. The sale of armaments by these producers is also addressed. Special attention is given to the effect this trend will have on United States national security and its implications for foreign policy.

Ralph Sanders is a professor emeritus at the United States National Defense University, Industrial College of the Armed Forces.

Serbin, Andres. *Caribbean Geopolitics: Toward Security through Peace?* Boulder, Colorado, Lynne Reinner Publishers, 1990. 131 p. (LACC (Latin American and Caribbean Center) Studies on Latin America and the Caribbean)

Andres Serbin details the factors which have shaped the regional geopolitical dynamics of the English-speaking, newly-independent Caribbean States since 1962. Special attention is paid to efforts at regional cooperation and integration, and the historical difficulties in relations between Latin America and the English-speaking Caribbean States is noted. In the field of arms control and disarmament, there is a chapter devoted to the proposed establishment of a peace zone in the Caribbean.

This English edition of the study—the original was published in Spanish in 1988 for the South American Commission for Peace, Re-

gional Security and Democracy—includes an additional chapter to cover events which have since taken place.

The author of many publications on the Caribbean, Andres Serbin is presently director of the Venezuelan Institute for Social and Political Studies (INVESP).

Sivard, Ruth Leger. *World Military and Social Expenditures 1991*. Washington, D.C., World Priorities, 1991. 64 p.

Ruth Leger Sivard has edited and published *World Military and Social Expenditures* since 1974 to provide a factual, quantitative portrait of the choices nations make in setting their priorities. For example, data in the 1991 edition show military expenditures from 1960 to 1988 for industrial countries—accounting for 85 per cent of the global total—and for developing countries, where the burden is greater as the average per capita income is only 5 per cent of that of the developed countries. The 1991 edition also includes a world map with nuclear command centres, nuclear air, naval and missile bases, nuclear-weapon production sites and test sites; a chart of the total cumulative arms exports by the 10 largest exporters, plus a table showing the cost of imports by the 20 countries importing the most, and a tabulation of wars and war-related deaths from 1500 to 1990.

Thompson, Kenneth W. and Steven L. Rearden, eds. *Paul H. Nitze on National Security and Arms Control*. New York, University Press of America, 1990. 240 p. (W. Alton Jones Foundation Series on Arms Control, volume XIV)

The volume brings together a collection of important works spanning 30 years (1950-1980) on national security and arms control by Paul H. Nitze, whose words and deeds "have contributed significantly to policy adjustments that the United States has had to make since World War II". Nitze is perhaps best known for the roles he played in negotiating for the United States the SALT (strategic arms limitation talks) and the INF (intermediate nuclear forces) agreements with the Soviet Union.

The volume is organized into three broad categories: strategy and security, the military component of national security, and the arms control component of national security. It is the second of a two-volume

series devoted to Paul H. Nitze—the first volume focusing on his work in foreign policy.

United States Congress, Office of Technology Assessment. *Global Arms Trade*. Washington, D.C., U.S. Government Printing Office, June 1991. 180 p.

This report describes and analyses global trade in modern conventional arms, including the dynamics of technology transfer and equipment sales, and the role of United States and European companies in spreading defence technology to developing nations. It identifies a major policy dilemma—how to balance the use of arms exports as instruments of foreign policy, pressure by companies for greater and freer access to foreign markets, and the need to stem both a dangerous world-wide arms build-up and the growth of the defence industry.

This assessment, requested by the United States Congress, represents the final product of OTA's research of international collaboration in defence technology. A special report entitled, *Arming Our Allies: Cooperation and Competition in Defense Technology*, was released in May 1990.

Wetterqvist, Fredrik. *French Security and Defence Policy: Current Developments and Future Prospects*. Stockholm, National Defence Research Institute, 1990. 155 p. (FOA Report C-10325)

The report examines present French security and defence policy over the past fifteen years, focusing on the current military plan (1987-1991) and the implications of government policy decisions against the background of recent major changes in French post-war military doctrine. Among the subjects covered are: the development of French nuclear weapons; Franco-German relations, strategic nuclear forces and nuclear deterrence; France's position in a common European defence; the structure and organization of French armed forces; and arms trade and the French defence industry. An extensive bibliography and French-English glossary of abbreviations and acronyms are included in the report.

Wright, Susan, ed. *Preventing a Biological Arms Race*. Cambridge, Massachusetts, MIT Press, 1990. 446 p.

This collection of 15 essays is a timely, authoritative source of essential technical, political, legal and historical background informa-

tion on biological weapons. While issues associated with biological warfare and disarmament are focused upon, their connection with the problem of chemical warfare and the broader goal of comprehensive chemical and biological disarmament is also emphasized. The book, designed for a general audience, provides extensive documentation in its appendices.

The book is divided into several sections covering the history of United States biological warfare policy, ethical and legal issues posed by biological warfare, military development of biotechnology, allegations of alleged use, and ways to strengthen barriers to biological warfare.

Noting, on the one hand, the resurgence of military research in biotechnology, begun in the early 1980s and, on the other hand, the reaffirmation by all major States to respect the provisions of the biological weapons Convention, the editor believes that the course of biological disarmament in the 1990s will be determined by which of these trends comes to dominate. The book's concluding chapter offers views on constructive approaches to removing the threat of a biological arms race and to ensuring that the new biogenetic technologies are used solely for peaceful purposes.

Further Publications

Disarmament is unable to publish summaries of all books and articles sent to the Editor. The following is a list of items received recently.

Allard, C. Kenneth. *Command, Control, and the Common Defense*. New Haven, Connecticut, Yale University Press, 1990. 317 p.

Banner, Allen V. *Overhead Imaging for Verification and Peacekeeping: Three Studies*. Ottawa, Arms Control and Disarmament Division, External Affairs and International Trade Canada, March 1991. 44 p. (Arms Control Verification Occasional Papers No. 6)

Blechman, Barry M., and Gunnar Gunnarsson. *Arms Control and Confidence-building in Northern Waters: A Conference in Akureyri, Iceland, 14-16 August 1990*. Reykjavik, Center for International Studies, University of Iceland with the Henry L. Stimson Center, 1990. 45 p.

Boutwell, Jeffrey. *The German Nuclear Dilemma*. Ithaca, New York, Cornell University Press, 1990. 247 p. (Cornell Studies in Security Affairs)

Brauch, Hans-Günter, ed. *Verification and Arms Control Implications for European Security: The Results of the Sixth International AFES-PRESS Conference — Parts I and II*. Mosbach, Arbeitsgruppe Friedensforschung und Europäische Sicherheitspolitik (Peace Research and European Security Studies), 1990. 224 p. and 214 p. (AFES-Press Report Nos. 35 and 36)

Bustamente, Fernando. *Los Intereses Estratégicos de los Estados Unidos y America Latina en los Años 80*. Santiago, Chile, Facultad Latinoamericana de Ciencias Sociales, marzo 1989. 82 p. (Documento de Trabajo Programa FLASCO-Chile Número 398)

Cimbala, Stephen J., ed. *Strategic Arms Control after SALT*. Wilmington, Delaware, Scholarly Resources Inc., 1989. 233 p.

Coker, Christopher. *A Farewell to Arms Control: The Irrelevance of CFE*. London, Institute for European Defence and Strategic Studies, 1991. 42 p. (Occasional Paper No. 49)

Cox, Michael, ed. *Beyond the Cold War: Superpowers at the Crossroads?* New York, University Press of America for the White Burkett Miller Center of Public Affairs at the University of Virginia, 1990. 237 p. (Exxon Education Foundation Series on Rhetoric and Political Discourse, Volume 14)

Ekblad, Ulf, and Hans-Ake Olsson. *Satellite Imagery Detection of Preparations for Underground Nuclear Explosions*. Linkoping, Forsvarets Forskningsanstalt, January 1990. 18 p. (FOA Rapport C 30560-9.4)

Honig, Jan Willem. *NATO: An Institution under Threat?* New York, Institute for East-West Security Studies, 1991. (Occasional Paper Series No. 22)

Hewedy, Amin. *Militarization and Security in the Middle East: Its Impact on Development and Democracy*. London, Pinter Publishers for the United Nations University, 1989. 144 p.

Institute for Foreign Policy Analysis, Inc., *The Soviet Union after Perestroika: Change and Continuity*. Cambridge, Massachusetts, Brassey's (US), Inc., 1991. 117 p. (Special Report)

Kemme, David M. *Economic Transition in Eastern Europe and the Soviet Union: Issues and Strategies*. New York, Institute for East-West Security Studies, 1991. (Occasional Paper Series No. 20)

Lederman, Itshak. *Arms Control and Verification: Past Development, German Approaches to CFE Verification and Possible Models of Verification in the Future*. Hamburg, Germany, Institut für Friedensforschung und Sicherheitpolitik, 1990. 92 p.

Lister, Frederick L. *Thoughts on the Use of Military Force in the Gulf Crisis*. New York, The Ralph Bunche Institute on the United Nations, June 1991. 9 p. (Occasional Paper Series Number VII)

Marlin, John Tepper and Paul Grenier, eds. *Soviet Conversion 1991: Report and Recommendations of an International Working Group on Economic Demilitarization and Adjustment*. New York, Council on Economic Priorities, 1991. 92 p.

Millán, Víctor. *Percepciones de Amenaza y Adquisición de Armamentos en America del Sur: 1971-1985*. Santiago, Chile, Facultad

Latinoamericana de Ciencias Sociales, octubre 1989. 104 p. (Contribuciones Programa FLASCO-Chile No. 62)

Molina Mejia, Raul. *The Role of the United Nations in the Political Crisis in Central America 1979-Present*. New York, The Ralph Bunche Institute on the United Nations, May 1991. 13 p. (Occasional Paper Series Number VI)

Nuclear Arsenals for the 21st Century. By Ted Corbin *and others*. Cambridge, Massachusetts, Program in Science and Technology for International Security, Massachusetts Institute of Technology, January 1991. 101 p. (Report No. 23)

Orbons, Sjef. *A Classification and Evaluation of Concepts for the Defense of NATO's Central Sector*. Mosbach, Arbeitsgruppe Friedensforschung und Europäische Sicherheitspolitik (Peace Research and European Security Studies), 1989. 74 p. (AFES-Press Report No. 33)

Sagan, Scott D. *Moving Targets: Nuclear Strategy and National Security*. Princeton, New Jersey, Princeton University Press for the Council on Foreign Relations, 1989. 237 p.

Schweitzer, Carl-Christoph. *The Changing Western Analysis of the Soviet Threat*. New York, St. Martin's Press in association with Nomos Verlagsgesellschaft, 1990. 318 p.

Smith, Jeff. *Unthinking the Unthinkable: Nuclear Weapons and Western Culture*. Bloomington, Indiana, Indiana University Press, 1989. 190 p.

Smith, Raymond F. *Negotiating with the Soviets*. Bloomington, Indiana, Indiana University Press for the Institute for the Study of Diplomacy, 1989. 148 p.

The U.S. Stake in Naval Arms Control. By Barry M. Blechman *and others*. Washington, D.C., The Henry L. Stimson Center, October 1990. 393 p.

U.S.A. Congress, Office of Technology Assessment. *Arming Our Allies: Cooperation and Competition in Defense Technology*. Washington, D.C., May 1990. 113 p.

Yavar G., Yerma. *La coyuntura Estratégica en America Latina y el Caribe: 1987*. Santigo, Chile, Facultad Latinoamericana de Ciencias Sociales, marzo 1989. 254 p. (Documento de Trabajo Programa FLASCO-Chile Numero 399)

Other Recent United Nations Publications on Disarmament

Department for Disarmament Affairs

Disarmament Yearbook
The United Nations Disarmament Yearbook
Vol.15:1990 (Sales No. E.91.IX.8)

Study
Comprehensive Study on Nuclear Weapons
(Sales No. E.91.IX.10)

Topical Papers
Conversion: Economic Adjustments in an Era of Arms Reduction (*Volume II*) (Topical Papers 5, 1991)
(Sales No. E.91.IX.7)

Disarmament Facts
Number 76: *Towards a Nuclear-Weapon-Free Zone in the Middle East: Summary of a United Nations Study**
Number 77: *Nuclear Weapons: Summary of a United Nations Study**

Disarmament Newsletter
August—Volume 9, Number 4**
October—Volume 9, Number 5**

United Nations Institute for Disarmament Research

Research Reports
Peaceful and Non-Peaceful Uses of Space: Problems of Definition for the Prevention of an Arms Race, by Bhupendra

Jasani (ed.), published for UNIDIR by Taylor and Francis, 1991, 179 p.

Vérification: la position soviétique. Passé, présent et avenir, by Mikhail Kokeiev and André Androssov, 1991, 145 p. (Sales No. G.V.F.90.0.6)

Confidence-building Measures and International Security-The Political and Military Aspects: A Soviet Approach by Igor Scherbak, 1991, 179 p. (Sales No. G.V.E.91.0.7)

Verification of Current Disarmament and Arms Limitation Agreements: Ways, Means and Practices, Serge Sur, ed., published for UNIDIR by Dartmouth, forthcoming.

Disarmament Agreements and Negotiations: The Economic Dimension, Serge Sur, ed., published for UNIDIR by Dartmouth, forthcoming.

UNIDIR Newsletter

Vol. 4, No. 2, June/juin 1991, *Biological Weapons/Armes biologiques*, 40 p.

Vol. 4, No. 3, September/septembre 1991, *Naval and Maritime Issues/Questions navales et maritimes*, forthcoming.

About United Nations Publications

United Nations sales publications may be obtained from bookstores and distributors throughout the world or by writing to: United Nations, Sales Section, New York or Geneva. Non-sales publications may be obtained by writing to the Department for Disarmament Affairs, United Nations, New York.

As of 1990, the UNIDIR Newsletter is available for a $25 subscription (four issues). Institutions and inividuals are encouraged to subscribe to the quarterly UNIDIR Newsletter through United Nations Sales Section, Palais des Nations, CH-1211 Geneva 10, Switzerland; tel.: (41 22) 734-60-11, Ext. 2612; Fax: (41 11) 733-98-79.

* Also published in Arabic, Chinese, French, Russian and Spanish.

** Also published in French, Russian and Spanish.

Contents of Recent Issues of *Disarmament*

Disarmament

Volume XIV, Number 3—1991

Ballistic Missiles: Future Security Implications

Ballistic Missile Proliferation: Seeking Global Solutions to Regional Problems
Thomas G. Mahnken

Proliferation of Missile Capability
Benoit F. Morel

Proliferation of Ballistic Missiles and Regional Security
Zhuang Maocheng

Accidental Nuclear War

The Swedish Initiative on Accidental Nuclear War
Sven Hellman

Preventing Accidental Nuclear War: Risks and Remedies in a Post-Cold-War World
Michael D. Wallace

Africa as a Nuclear-Weapon-Free Zone

The Prospects for, and Efficacy of a Nuclear-Weapon-Free Zone in Africa
Bariyu A. Adeyemi

The Prospects for, and Implementation of a Nuclear-Weapon-Free Zone in Africa
David A. V. Fischer

Confidence- and Security-building Measures: Their Applicability in the Asia-Pacific Region

Selected papers presented at the United Nations Regional Meeting on Confidence-building Measures in the Asia-Pacific Region, held at Kathmandu, Nepal, 24-26 January 1991

South-East Asian Security Issues and Confidence-building
Kusuma Snitwongse

Confidence-building Measures in the Asia-Pacific Region
Qin Huasun

The Conventional Forces in Europe Treaty (continued)
Timely Decisions in the Field of Military and Strategic Security
Victor P. Starodubov

Documentation Relating to Disarmament
Security Council Resolution 687

Recent Books and Articles

Other Recent United Nations Publications on Disarmament

Disarmament
Volume XIV, Number 2—1991

The Conventional Armed Forces in Europe Treaty
The Paris Summit: A Disarmament and Security Assessment
Gilles Andreani

The Treaty on Conventional Armed Forces in Europe
Michael Moodie

The Treaty on Conventional Forces in Europe—a Polish View
Tadeusz Strulak

The Role of the United Nations in Disarmament
Yasushi Akashi

Developments in Verification: Experiences in Bilateral Verification
Verification Problems: The Experience of Bilateral Negotiations
Evgueni N. Golovko

A United States Perspective on Bilateral Verification
Edward J. Lacey

Multilateral Verification: Opportunities and Constraints
Fred Bild and Peter Jones

Amendment Conference to the Partial Test-Ban Treaty
Raising the Visibility of the Comprehensive Test-Ban Issue
Miguel Marín-Bosch

Towards the Third Biological Weapons Convention Review Conference
The Potential Threat of Biological and Toxin Weapons
Esmat A. Ezz

Strengthening the Biological Weapons Convention
Erhard Geissler

The Next Step: A Biological Verification Régime
Barbara Hatch Rosenberg

The State of the Biological Weapons Convention
Barend ter Haar

Documentation Relating to Disarmament
Statement of the Member States of the Warsaw Treaty

Recent Books and Articles

Chronicle of Disarmament Activities

Disarmament

Volume XIV, Number 1—1991

Beyond Polarity: Towards a European Security System

From Collective Self-Defence to a Collective Security System in Europe
Hans Günter Brauch

Europe as a Contest of Meanings
Pertti Joenniemi

Building an All-European Security System: A Czechoslovak View
Zdenek Matejka

A Pan-European Security Community: Utopia or Realistic Perspective?
Luc Reychler

Conversion: Economic Adjustments in an Era of Arms Reduction

Selected papers presented at the United Nations Conference, held at Moscow, USSR, 13-17 August 1990

The National Experience of the USSR
Alexei I. Izyumov

Conversion Concepts and Approaches
Adam Roberts

Specific Issues of Conversion: Industries and Trade
Herbert Wulf

The Fourth Review Conference of the Non-proliferation Treaty

Arpád Prandler

Confidence-building Measures in the Maritime Environment

Selected papers presented at the United Nations Seminar, held at Varna, Bulgaria, 4-6 September 1990

Necessity of Including Naval Armaments
in Disarmament Negotiations
Andrei E. Granovskiy

Naval Arms Control: The Burden of Proof
Douglas M. Johnston

The United Nations and Naval Power in the
Post-Cold-War World
Gwyn Prins

Documentation Relating to Disarmament

Central American Security Commission Agreement

Joint Declaration of the Federal Republic of Germany and of the German Democratic Republic on Non-Proliferation of Nuclear, Chemical and Biological Weapons

Joint Declaration of Twenty-Two States Parties to the Treaty on Conventional Armed Forces in Europe

Statement of the United Nations Secretary-General on the Occasion of the Signing of the Treaty on Conventional Armed Forces in Europe

Argentine-Brazilian Joint Declaration on Nuclear Policy issued at Foz do Iguaçú, Brazil

Recent Books and Articles

Chronicle of Disarmament Activities

Litho in United Nations, N.Y.
40855—September 1991—5,780

ISSN 0251-9518

DISARMAMENT

A periodic review by the United Nations

Courtesy of

Disarmament

a periodic review by the United Nations